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12.

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Edited by
FRANCIS HEMMING, C.M.G., C.B.E.
Secretary to the International Commission on Zoological Nomenclature

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Addresses of the Commission and the Trust

Secretariat of the Commission : 28 Park Village East, Regent's Park, London, N.W.1

Offices of the Trust : 41 Queen's Gate, London, S.W.7

FOREWORD

The present is the second complete volume of the *Bulletin of Zoological Nomenclature* devoted to the publication of applications relating to individual nomenclatorial problems to be published since the close of the Fourteenth International Congress of Zoology, Copenhagen, 1953. Publication began in June 1956, within a month of the issue of the last corresponding Part (Part 11) of the preceding volume. Publication proceeded rapidly and in a little over five months the present volume was complete except for the concluding Index Part (Part 12). In addition to the scientific matter referred to above, the present volume contains the Report and Accounts of the International Trust for Zoological Nomenclature for the year 1955. This Report was prepared in such a way as to serve the dual purpose of describing the work performed by the Trust during the year under review and of providing for that year the Progress Report on the work of the Office of the Commission in the series which at Paris in 1948 it was arranged should be furnished from time to time by the Secretary to the Commission.

2. The present volume contains 470 pages (T.P.—XXVIII, i—xxvi, 1—416 and three plates) and comprises 197 papers of which 50 are original applications submitted to the International Commission for decision and 147 are comments by specialists on applications submitted by other authors. Of these 147 comments, 119 relate to applications in the present volume and 28 to applications in Volume 11 of the *Bulletin of Zoological Nomenclature*.

3. Of the 50 original applications referred to above, one deals simultaneously with proposals relating to taxa belonging to two Classes of the Animal Kingdom. For practical purposes therefore this volume contains 51 applications submitted for decision. Similarly, many of the applications were submitted by two or more joint authors. When account is taken of this fact the number of applicants is seen to be 66.

4. Of the 51 applications published in the present volume, one asked for a *Declaration* regarding the method to be followed in determining the relative precedence to be accorded to two or more names for family-group taxa published in the same book and on the same date. Further, two applications related to the status of certain zoological works. Thus the number of applications exclusively concerned with names is 48.

5. 39 (76 per cent.) of the applications published in the present volume are applications by specialists for the use by the International Commission on Zoological Nomenclature of its Plenary Powers for the purpose of promoting stability in nomenclature and of avoiding confusion and name-changing. All these cases were concerned with individual names.

6. The 48 applications relating to individual names published in the present volume, when grouped by reference to the Classes of the Animal Kingdom to which the genera or species concerned belong, were distributed as follows:—

TABLE 1

Distribution of applications by Classes of the Animal Kingdom

<i>Name of Class</i>	<i>Number of applications</i>
Nematoda	1
Crustacea	12
Trilobita	8
Insecta	7
Arachnida	2
Gastropoda	1
Crinoidea	1
Pisces	3
Amphibia	2
Reptilia	4
Aves	6
Mammalia	1
Total	48

7. When the 66 applicants are arranged by reference to the countries in which they are resident, applications are seen to have been received from specialists in the following countries :—

TABLE 2

Distribution of applicants by country of residence

<i>Country of Residence</i>	<i>Number of applicants</i>
Australia	2
Denmark	4
Germany	2
Hawaii	2
Netherlands	6
New Zealand	3
Norway	1
Panama	1
Singapore	1
Sweden	2
United Kingdom	29
United States of America	13
Total	66

8. The following table gives particulars of the proposals contained in applications in the present volume for addition of names to the *Official Lists*

VIII

of valid names and works and to the corresponding *Official Indexes* if rejected and invalid names and works :—

TABLE 3

Proposals for additions to the "Official Lists" and "Official Indexes" respectively

<i>Category</i>	<i>Official Lists (valid names and works approved as available for zoological nomenclature)</i>	<i>Official Indexes (rejected and invalid names and works)</i>
Specific names	130	88
Generic names	87	113
Family-Group Names	39	42
Titles of Works	—	2
Totals	256	245

9. Of the 147 comments published in the present volume, several relate to two or more applications, thus making the total number of comments on applications 156. Of these 10 were comments relating to the status of books. The remaining 146 related to applications concerning individual names.

10. If the comments on proposals regarding individual names are grouped according to the Class of the Animal Kingdom to which the taxa concerned belong, the distribution of these comments is found to be as follows :—

TABLE 4

Distribution of comments on applications relating to names, by
Classes of the Animal Kingdom

<i>Name of Class</i>	<i>Number of Comments</i>
Crustacea	32
Trilobita	20
Insecta	39
Arachnida	1
Gastropoda	2
Pelecypoda	6
Cephalopoda	1
Crinoidea	1
Pisces	12
Amphibia	1
Reptilia	14
Aves	17
Mammalia	
Total	146

11. The 147 comments published in the present volume included five submitted by joint authors. When this is taken into account, it is found that the total number of specialists submitting comments was 152.

12. When the authors of comments published in this volume are grouped by reference to their country of residence, the distribution is found to be as follows :—

TABLE 5

Distribution of authors of comments by country of residence of the authors concerned

<i>Country of Residence</i>	<i>Number of authors of comments</i>
Argentina	1
Australia	1
Belgian Congo	1
Belgium	3
Brazil	2
Canada	3
Czechoslovakia	1
Denmark	5
France	6
Germany	14
India	1
Italy	3
Japan	1
Kenya	3
Madagascar	1
Netherlands	5
New Zealand	5
Norway	3
Poland	1
Sweden	5
Switzerland	3
Trinidad	1
Union of South Africa	3
Union of Soviet Socialist Republics	1
United Kingdom	31
United States of America	48
Total	152

13. For the preparation of the authors' and subject indexes of the present volume the Commission is again indebted to Miss Mary Cosh, M.A.

FRANCIS HEMMING

*Secretary to the International Commission
on Zoological Nomenclature*

28 Park Village East,
Regent's Park,
London, N.W.1.

1st May 1957.

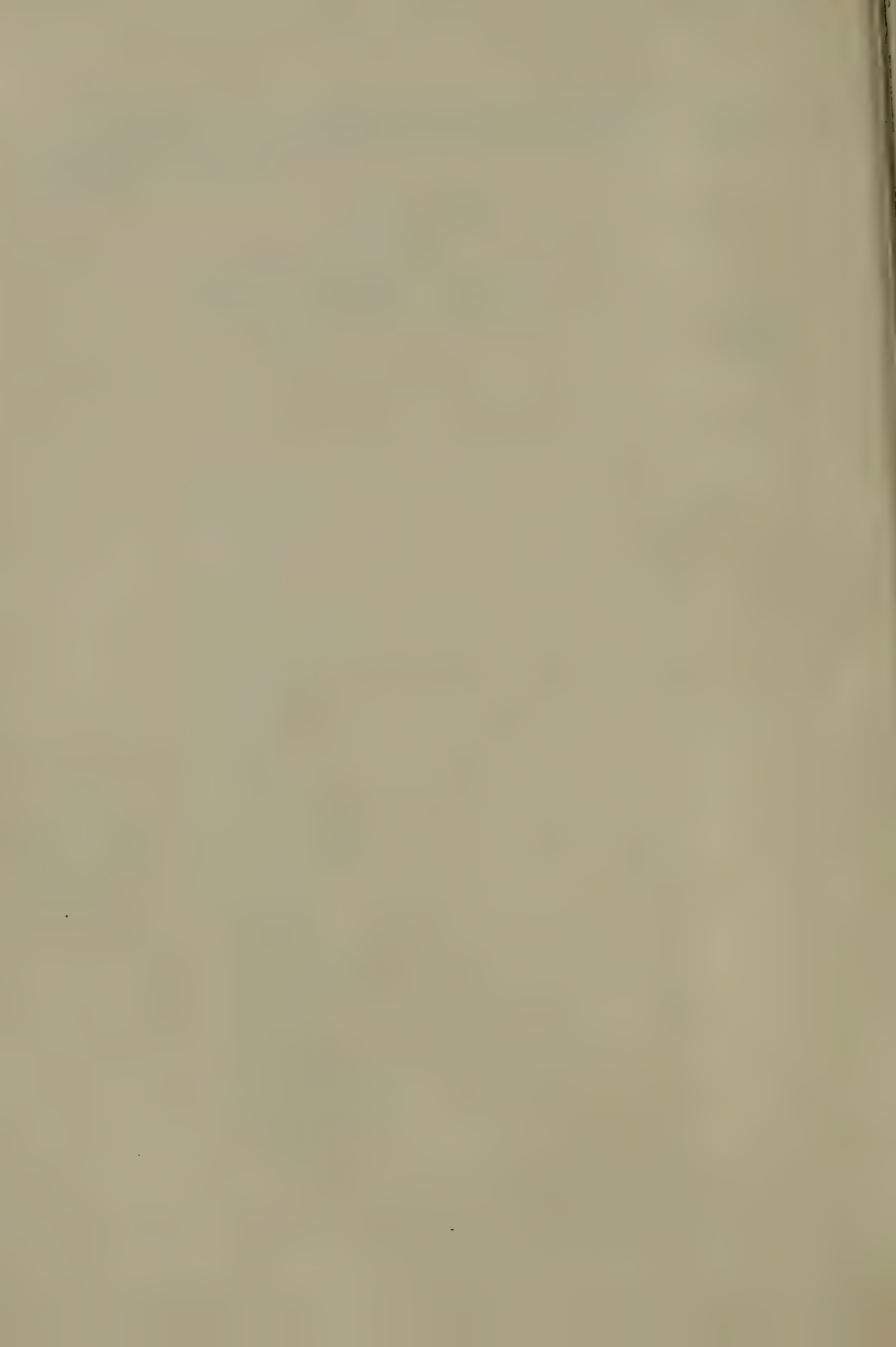


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PURCHASED
30 AUG 1957

**INTERNATIONAL TRUST
FOR
ZOOLOGICAL NOMENCLATURE**

ACCOUNTS FOR THE YEAR 1955

FINANCIAL REPORT OF THE COMMITTEE OF MANAGEMENT
OF THE INTERNATIONAL TRUST FOR ZOOLOGICAL NOMEN-
CLATURE FOR THE YEAR 1955

(Report approved and adopted by the International Trust for Zoological
Nomenclature in Annual General Meeting)

The year 1955 witnessed a continuation of the forward policy adopted in the previous year and was crowned with an even greater measure of success. Substantial progress was made with the preparation and publication of *Opinions* embodying decisions by the International Commission on questions submitted to it for decision and an appreciably larger instalment of the *Bulletin of Zoological Nomenclature* was published during the year than had appeared in 1954. This shift of effort as between the two branches of the Trust's Publications Programme was the result of a deliberate decision taken at the beginning of the year. It was then felt that such substantial progress had been made in 1954 in wiping-off the arrears of cases on which decisions had been taken by the Commission but for which *Opinions* had not yet been prepared that the time had come when a concerted attack should be made on the arrears represented by cases which had not reached the stage of being published in the *Bulletin*. The progress made in this field during the year just closed was even greater than the number of Parts actually published suggests, for in addition to the papers actually published a large number of cases were advanced to a stage which should enable them to be published in 1956. The applications published in the *Bulletin* during 1955 constitute an important reserve on which it will be possible for the Commission to take decisions in the coming year. During the year also votes were taken by the Commission on the majority of the cases for which the six-month waiting period following publication in the *Bulletin* was completed during that period. In other fields of work also gratifying progress was achieved. A great advance was made in the preparation for the publication of the *Official Lists* and *Official Indexes* in book-form. A large number of Voting Papers concerned with this matter were dealt with by the Commission during the year and for most of these *Directions* embodying the decisions taken by the Commission were prepared during the period under review. The work in this field involves the consideration of a very large number of points of detail, as may be judged by the fact that the decisions so taken exceeded 1,300 in number. During the year also a valuable start was made with the survey of the decisions in regard to the *Règles* taken in Paris in 1948 and at Copenhagen in 1953 needed to enable the Trust, before publishing the proposed draft text, to satisfy itself that it conforms in all respects with the decisions taken by the International Congresses of Zoology. These varied activities naturally necessitated increases in staff and involved also other increases in administrative expenses. In these circumstances and having regard to the fact that a considerable part of the work carried out, notably that in connection with the preparation of cases for the *Bulletin*, was of a

nature which did not yield immediate results in the period under review it is particularly gratifying that in spite of the fact that the total amount published in 1955 was less than in 1954 the income obtained from sales was almost as great as in the previous year and yielded a revenue sufficient after all expenses had been met to produce a surplus substantially greater than that secured in any previous year.

2. The progress achieved in the two-year period 1954-1955 in wiping-off arrears of work in the Office of the Commission : Two years have now passed since the present Honorary Secretary on his retirement from the United Kingdom Civil Service began to work for the Commission on a whole-time basis and since the first salaried officials were appointed to assist him in that task. During these two years a remarkable change has occurred in the state of the work in the Office of the Commission. At the beginning of 1954 there were about 150 cases on which decisions had been taken by the Commission but on which *Opinions* had not been prepared ; there were about 90 cases which had been published in the *Bulletin of Zoological Nomenclature* for six months or more but on which no vote had as yet been taken by the Commission ; there were about 400 cases on the books of the Commission which had not been published in the *Bulletin* and which therefore had not reached the first stage on the road towards obtaining a decision. As the result of the work carried out during the last two years 259 *Opinions*, *Declarations* and *Directions* have been prepared, of which 221 had been published by the end of 1955. In consequence, all the old arrears (with the exception of a few cases on which unexpected difficulties arose at a late stage) belonging to the first of the groups discussed above had been wiped out by the end of 1955. As the result of votes taken by the Commission on other cases during the year 1955 there were, however, some 40 further cases which had reached the stage at which they were ready to be embodied in *Opinions*, *Declarations* or *Directions*. It will be seen therefore that the arrears in this field which two years ago appeared so intractable have now virtually been wiped out. Similarly, by the end of 1955 the problem represented by cases which were ready for voting by the Commission but on which Voting Papers had not been issued had ceased to be one of serious importance, for by 31st December the number of such cases had been reduced to less than twenty, all of them cases for which the prescribed six-month waiting period following publication in the *Bulletin* had only expired some six weeks earlier. As regards cases on which communications had been addressed to the Commission or which had arisen directly in the course of the work of the Office of the Commission (in connection, for example, with the revision of the entries made on the *Official List of Generic Names in Zoology* in the period up to the close of 1936), it is more difficult to give precise particulars partly because for one reason or another preliminary inquiries received do not always lead to the submission of applications and partly because a considerable number of the newly registered cases do not in fact represent new applications but reflect rather the separation of disparate elements from applications which, when originally submitted, dealt with more than one subject. Even when account is taken of these considerations, it seems

likely that the total number of applications awaiting publication in the *Bulletin* at the end of 1955 was not appreciably, if at all, less than it was at the end of 1953. The composition of these arrears was however considerably different, for during the two-year period a number of old cases had reached the *Bulletin* and in consequence the average length of time since the original receipt of the applications still outstanding had shown some reduction. That but little progress should have been made in wiping off arrears in this sector was inevitable when the Secretary was devoting the bulk of his attention to the preparation of *Opinions* on cases on which decisions had already been taken by the Commission and in pressing on with the issue of Voting Papers in respect of cases for which this stage was overdue. The Secretary to the Commission has, however, informed the Trust that in view of the satisfactory progress made in the foregoing sectors, he proposes in 1956 to devote a much larger portion of his time to work on cases awaiting publication in the *Bulletin*. In consequence the Trust proposes to frame its Publications Programme for 1956 on the basis that, while every effort will be made to press on with the publication of *Opinions*, *Declarations* and *Directions* adopted by the Commission as and when these are ready to be sent to the printer, the main feature of the 1956 publications will be a great increase in the number of Parts of the *Bulletin* published.

3. The volume of work handled in the Offices of the Commission and the Trust :

The particulars given in the preceding paragraph show in broad outline the general scope of the work carried out by the Secretary during the past two years. Naturally, however, they give no indication of the volume of work handled by the Staff. In the case of every application this involves (i) its registration at the time of receipt and the allocation to it of a Registered Number in the Z.N.(S.) Series ; (ii) the registration and filing of correspondence between the Secretary and the applicant in the period up to the time when the application is sent to the printer ; (iii) the registration of all documents passing between the Office of the Commission and the printer ; (iv) the making up of Parts for the *Bulletin* ; (v) the registration and filing of the correspondence which commonly takes place during the period following publication ; (vi) the registration of comments and their preparation for publication in the *Bulletin* ; (vii) the preparation and issue of Voting Papers on the close of the prescribed six months waiting period following publication ; (viii) the recording of votes on the return from Commissioners of completed Voting Papers ; (ix) the handling of all matters concerned with *Opinions* embodying decisions taken by the Commission from the time when the *Opinion* is completed by the Secretary until publication takes place. Moreover a large amount of time is necessarily occupied in proof reading, every proof being read by two members of the staff. The smooth operation of these successive stages described above inevitably involves a rather complicated internal mechanism for following the movements of papers and proofs, all of which is operated by the staff with the minimum of reference to the Secretary who is thus relieved of a great burden and freed for those parts of the work on each case which he only is in a position to carry

out. Some idea of the volume of work carried out by the salaried staff in 1955 may be judged by the fact that in that year the average number of hours worked weekly by the staff as a whole (including the Research Assistants working in the "Official List" and "Règles" Sections respectively and the portion of the time devoted by one member of the staff to financial work in the Office of the Trust) amounted to about 140 hours or between 6,000 and 7,000 hours in the year as a whole.

4. Scope of the publications issued in 1955 : In general, the Publications Programme adopted by the Trust in 1955 followed the lines laid down in 1954. Great stress continued to be placed upon the preparation and publication of *Opinions* embodying decisions already taken by the Commission, it being considered that once a decision had been taken by the Commission on a given subject, the formal promulgation of that decision should follow at the earliest possible moment. At the same time there was, however, a shift of emphasis in the policy adopted towards the *Bulletin of Zoological Nomenclature*. In 1954, as explained in the Trust's Report for that year, the publication of further Parts of the *Bulletin* was deliberately subordinated to the publication of *Opinions* in regard to individual cases on which decisions had already been taken by the Commission. In 1955 the Trust took the view that the progress in the publication of *Opinions* made during the previous year was such as would justify a partial switch in the work of the Office of the Commission from the publication of *Opinions* to the publication of additional Parts of the *Bulletin*. This was urgently needed in order to bring to the attention of the Commission the large number of old applications awaiting consideration. The amount of time which on the average it is necessary for the Office of the Commission to spend on the preparation of an application for publication in the *Bulletin* is much greater than that involved in the preparation of an *Opinion* for the press. For in the case of an *Opinion* all the requisite information has normally been collected at earlier stages in the consideration of the case and it is only occasionally that some hitherto unexpected difficulty emerges in the course of drafting. In the case of new applications the position is very different, for at the time of their original submission very few applications contain all the information required for the purposes of the Commission and extensive correspondence with the applicant is often necessary before an application is ready to be sent to the printer. Moreover, even in the case of the small minority of applications which are found to be substantially complete when first submitted, a considerable amount of work is necessary before despatch to the printer, for experience has shown that in every case it is necessary to ensure, for example, that bibliographical references are given for all the names involved and that the references supplied are both correct and cited in a manner uniform with that adopted in the citation of the works concerned when reference has been made to them in earlier cases dealt with by the Commission. It will be appreciated therefore that even a slight switch from work on *Opinions* to work on the *Bulletin* necessarily involves what might at first sight appear to be a disproportionate reduction in the rate of publication of *Opinions*. During the year

1955 the Trust continued its policy of arranging for the preparation and publication of author's and subject indexes of volumes in the *Opinions and Declarations* Series as soon as possible after the completion of the volume concerned.

5. Progress made in 1955 in carrying out the review of "Opinions" published in the period prior to 1948 : By the end of 1954 the Commission had completed, so far as concerned *Opinions* rendered in the period 1937-1948, the review of *Opinions* rendered prior to July 1948 prescribed by the Thirteenth International Congress of Zoology, Paris, 1948. The decisions so taken had been embodied in nine *Directions* of which seven (*Directions* 2, 4-9) were included in volume 2 of the *Opinions and Declarations* Series (the volume containing the *Opinions* embodying decisions taken by the Commission at its Session held at Lisbon in 1935) and two (*Directions* 1 & 3) were included in volume 3 of the foregoing Series (the volume, the first part of which contains the *Opinions* embodying decisions taken by the Commission in the period 1937-1938). Thus, by the beginning of 1955 the stage was set for the commencement of the review of the *Opinions* rendered in the period up to the end of 1936, namely *Opinions* 1-133. The task was known to be a formidable one, partly because during that period the Commission was not required to include in its *Opinions* particulars on a number of matters reference to which has since been made mandatory either by the Paris Congress of 1948 or by the Copenhagen Congress of 1953. The main cause of difficulty arose, however, from the fact that the general standard aimed at in these older *Opinions* was much lower than that which has since been adopted. In this connection it will be recalled that it was originally contemplated that these *Opinions* should be examined *seriatim*, the results of that examination being embodied in the form of notes to an annotated re-issue of the *Opinions* in question. In accordance with this programme re-issues of *Opinions* 1 to 16 were published in the period 1943-1947, together with nine *Declarations* (*Declarations* 1-9) embodying resolutions on nomenclatorial questions which had been adopted by the Commission on various dates between 1913 and 1935 but which had never been placed formally on record. These documents were published as Parts 1-25 of volume 1 of the *Opinions and Declarations* Series, a volume which had been specially reserved for this purpose when the foregoing Series was established in 1939. It was decided in Paris that this annotated edition should be discontinued, there being no need for it in view of the decisions then taken (a) to embody in the *Règles* the Rulings giving interpretations of particular Articles and (b) to instruct the Commission to carry out a general review of the Rulings given in those *Opinions* in order to bring them fully up to date in all particulars. At the same time the Paris Congress invited the Trust to arrange for the publication of a facsimile edition of *Opinions* 1-133. It was necessary therefore for the Trust at the beginning of 1955 to decide what arrangements should be made (i) for closing volume 1 of the *Opinions and Declarations* Series as far as it had been published before the opening of the Paris Congress in 1948 and (ii) for publishing the *Directions* which would be required for promulgating the decisions reached by the Commission in its review of the *Opinions* embodying decisions taken by it before its Session held in Lisbon in 1935. It appeared to the Trust that it would

be inconvenient, because illogical, that these *Directions* should be published in a volume of the *Opinions and Declarations* Series following volumes containing *Opinions* embodying decisions taken by the Commission long after the close of the period in which *Opinions* 1-133 were adopted. The Trust decided therefore that the best course would be to close the portion of volume 1 already published after the issue of two further Parts, the first (Part 26) giving particulars of the action taken either by the International Congress of Zoology or by the International Commission on Zoological Nomenclature in regard to the matters dealt with in the nine *Declarations* and sixteen *Opinions* published in it and the second (Part 27) containing the indexes and title page for the volume. At the same time the Trust decided that the *Directions* embodying the results of the survey by the Commission of the Rulings given in *Opinions* 1-133 should be published in a separately paged volume which would be treated as constituting a Section of volume 1 of the *Opinions and Declarations* Series. The Trust decided therefore to issue for the Section already published a title page denominating that Section as Section A of volume 1 and to embody the first instalment of the *Directions* embodying the results of the forthcoming survey of *Opinions* 1-133 in a Section to be styled "Section C". Section B was reserved for the *facsimile* edition of the foregoing *Opinions* which, as noted above, the Paris Congress had invited the Trust to publish. During the year under review Section A of volume 1 of the *Opinions and Declarations* Series was completed in accordance with the foregoing decision and an important start was made in the publication of Section C of the foregoing volume.

6. Particulars of "Opinions", "Declarations" and "Directions" published in 1955 : During the year 1955 the Trust published fifty-eight *Opinions* (*Opinions* 319-376), five *Declarations* (*Declarations* 14-17, 20) and twenty-one *Directions* (*Directions* 10-30). During the year also four volumes were completed by the publication of Index Parts (volumes 1A ; 2 ; 8 ; 9). Finally, during the year the Trust published two Parts containing historical matter necessary to the proper understanding of the remainder of the volume concerned. The first of these was Part 26 of Section A of volume 1 to which reference has already been made ; the second was Part C.7 of Section C of the same volume, this Part giving particulars of action already taken by the Commission to validate, correct or supplement Rulings given in one or other of the first hundred-and-thirty-three *Opinions* rendered by the Commission, the provision of this information being necessary in order to secure the inclusion in Section C of particulars relating to all decisions so far taken by the Commission in its review of the *Opinions* rendered up to the end of 1936. Altogether, therefore, ninety Parts in the *Opinions and Declarations* Series were published in the year 1955. The total number of pages published amounted to 1792 as compared with 2,280 in 1954. Large as is the number of Parts published in 1955, it is less by forty-nine than the number of Parts published in 1954. This reduction is due in part to the fact that, as explained in paragraph 4 above, a greater share of the resources of the Office of the Commission were devoted to the preparation of Parts for the *Bulletin* and in consequence a

smaller share to the publication of *Opinions* in 1955 than in 1954. In part, however, the reduction in the number of Parts published is attributable to the fact that many of the Parts published in 1955 dealt with more complicated problems than those dealt with in the Parts published in 1954 and were therefore of greater length. This is illustrated by the fact that, whereas the number of units published in 1955 was less by some 25 per cent. than in 1954, the average number of pages per Part rose from 16.4 pages (the figure for 1954) to 19.7 pages. The Parts published in 1955 were the following :—

- Vol. 1A : 2 Parts (Historical Summary and Index), 76 pp.
- Vol. 1C 19 Parts (*Directions* 10–13, 15–26, 29–30 ; Historical Summary), 336 pp.
- Vol. 2 : 1 Part (Index), 75 pp.
- Vol. 8 : 1 Part (Index), 44 pp.
- Vol. 9 : 20 Parts (*Opinions* 319–333 ; *Declarations* 14–17 ; Index), 343 pp.
- Vol. 10 : 21 Parts (*Opinions* 334–350 ; *Declaration* 20 ; *Directions* 14, 27, 28), 518 pp.
- Vol. 11 : 26 Parts (*Opinions* 351–376), 400 pp.

7. Income in 1955 from sales of the “ *Opinions and Declarations* ” Series :

Income from the sale of units of the *Opinions and Declarations* Series amounted in 1955 to £5,691 10s. 6d. and was thus almost identical with the income obtained in 1954 (£5,703 16s. 3d.). That this should have been the case is extremely gratifying when it is recalled that output in 1955 was equal to only about three-quarters of that in 1954. The rapid strides made in the sale of the *Opinions and Declarations* Series in 1955 is very strikingly illustrated by the fact that, whereas in 1954 sales exceeded printing costs (£5,110 3s. 5d.) by £593 12s. 10d. (itself a satisfactory result), sales in 1955 exceeded printing costs (£3,661 17s. 9d.) by no less than £2,029 12s. 9d. This three-and-a-half-fold increase in a single year is remarkable testimony to the growing demand by zoologists for access to the *Opinions* of the Commission and to the response to that demand by the great institutional libraries which serve zoologists throughout the world. The striking success achieved in 1955 in sales of the *Opinions and Declarations* Series is attributable in part to the accession of new subscribers and in part to large purchases of back sets.

8. Publication in 1955 of further instalments of the “ *Bulletin of Zoological Nomenclature* ” :

Ten Parts of the *Bulletin of Zoological Nomenclature* were published in 1955. These were the first ten Parts of a new volume (Volume 11), the publication of which was started early in the year. With the exception of the last Part (Part 10), about half of which was devoted to the Financial Report and Accounts for 1954, all the Parts published in 1955 were devoted to applications on individual nomenclatorial problems submitted to the Commission or to requests for *Declarations* on one aspect or another of the *Règles*. The total number of new applications so published in 1955 amounted to sixty-seven, of which fifty-seven were applications relating to individual

names or books and ten were requests for interpretative *Declarations*. The number of new applications exceeded by twenty-nine the number of such applications published in 1954, in which year the total amounted to thirty-eight applications (individual cases, thirty-seven; requests for *Declarations*, one). The total number of pages containing new applications published in 1955 amounted to 324 pages, an increase of 132 pages over the number of pages (192 pages) devoted to such subjects in 1954.

9. Income in 1955 from sales of the "Bulletin of Zoological Nomenclature" : Income from sales of the *Bulletin of Zoological Nomenclature* amounted in 1955 to the sum of £1,984 2s. 5d., a decrease of £241 0s. 9d. as compared with the sum of £2,225 3s. 2d. obtained from this source in 1954. This apparent decline in sales is attributable mainly to the fact that the expenditure on the printing of the *Bulletin* (£1,032 17s. 6d.) was less in 1955 than in 1954 by the sum of £177 18s. 5d. This expenditure secured sales which, together with the sale of back parts, amounted (as shown above) to £1,984 2s. 5d. The income from sales therefore exceeded the expenditure in 1955 on printing Parts of the *Bulletin* by the sum of £951 4s. 11d. This may be compared with the results achieved in 1954 when with an expenditure of £1,210 15s. 11d. and sales (including back sales) of £2,225 3s. 2d., the excess of income over sales amounted to £1,014 7s. 3d.

10. Income received from sales of the work "Copenhagen Decisions on Zoological Nomenclature" : Income received from the sale of the work *Copenhagen Decisions on Zoological Nomenclature* during the year under review amounted to £46 7s. 0d., this sum bringing the total income obtained from the sale of this work from the time of its publication to £238 18s. 10d. The expenditure involved in publishing this work amounted to £620 5s. 3d. The net loss incurred was therefore £381 6s. 5d. At the time when the Trust decided to publish this important work at the very low price of five shillings a copy it realised that, unless the number of copies sold reached a total of about 2,000, a financial loss would be inevitable. It deliberately decided, however, to take this risk for three reasons. First, the practical value of the decisions relating to the *Règles* taken by the Copenhagen Congress would necessarily depend during the period between the close of the Congress and the publication of the revised text of the *Règles* upon the extent to which copies of the work *Copenhagen Decisions* found their way into the libraries of zoological and palaeontological institutions in different parts of the world and on the number of copies purchased by such institutions for use by their scientific staffs. It was thought that it was well worth incurring the risk of a financial loss on the sale of this work in order to promote its world-wide distribution. Second, it was felt by the Trust that it would be in the interest of the international regulation of zoological nomenclature that this work should be placed on sale at so low a price that it would be within the means of every zoologist who might wish to obtain a copy for his personal use. Finally, this publication was of such outstanding importance that its publication at a quite exceptionally low price

would, the Trust considered, provide a unique opportunity for testing the validity of the view which had been advanced in certain quarters that the demand for publications relating to zoological nomenclature was highly elastic and therefore that reductions in the prices charged for such publications would be offset—or even more than offset—by a corresponding increase in the volume of sales. For its part, the Trust had always held that this view was ill-founded, believing rather that demand in this field was highly inelastic and therefore that it was unlikely that reductions in prices would be matched by an increase in sales and accordingly that the adoption of such a policy would inevitably lead to financial loss. The view of the Trust in this matter has been fully confirmed by the experience gained by the experiment represented by the very low price fixed for the work *Copenhagen Decisions*. At the outset an edition of 1,000 copies was printed, but arrangements were made for the work to be kept in standing type so that further copies could be run off without fresh printing costs if the demand for this work were to justify this course. This edition was exhausted during the year under review. Some further orders have since been received but they have not been sufficient in number to justify the expenditure involved in issuing a second impression of this work.

11. Total Income from sales of Publications : Total income from the sale of publications in 1955 amounted to £7,721 19s. 11d., or a decline of £371 2s. 6d. as compared with 1954. While it is to be regretted that total sales in 1955 did not quite reach the level secured in the previous year, the underlying position disclosed is very encouraging, for, whereas in 1954 an expenditure on printing of £6,320 19s. 4d. was required to produce sales amounting to £8,093 2s. 5d. or an excess of income over expenditure of 30 per cent., the much smaller expenditure incurred in 1955 (£4,694 15s. 3d.) produced sales which, as shown above, were almost as great in absolute terms as in the previous year and which represented an excess of income over expenditure of 63 per cent. That total output in 1955 reached the high level obtained is attributable to the fact that in 1955 as in 1954 the Commission had the benefit of the whole-time services of its Honorary Secretary and that that officer was again assisted by a salaried staff. The great improvement in the ratio of sales to production costs is due in part to a net increase in the number of subscribers and in part to an increase in the sale of back parts. Both these developments are highly satisfactory and offer an encouraging prospect for further progress in future years.

12. Donations received : Donations during the year amounted to £5 10s. 3d. These were gifts received (1) from Mr. A. E. Ellis (*Epsom College, Epsom*) and (2) from the American Ornithologists' Union, to both of whom the grateful thanks of the Trust are due.

13. Grant received through the International Union for Biological Sciences from U.N.E.S.C.O. : In the year 1955 the Trust continued to receive financial

assistance from U.N.E.S.C.O. through the International Union for Biological Sciences. The grant so received amounted to \$500.00 which realised £178 11s. 5d. This represents an increase over 1954 of £35 14s. 3d., this figure reflecting the increase by \$100.00 in the grant received. The Trust gratefully acknowledges the assistance so afforded and is happy to have this opportunity of placing on record its appreciation of the understanding of, and the support given to, its work both by U.N.E.S.C.O. and by the International Union over many years.

14. Total Income in 1955 : Total Income in 1955 made up of the items described in the preceding paragraphs amounted to £7,906 1s. 7d. At this level it fell short of the high figure secured in 1954 by no more than £362 3s. 10d. That this should be so is due entirely to the fact that, although, as already explained, the total output of publications was substantially less in 1955 than in 1954, the demand for those publications showed a remarkable resilience and the income obtained from sales was almost as great as it had been in the previous year.

15. Administrative Expenses : The year 1955 witnessed a further substantial increase in the activity of the Office of the Commission as the result largely of the progress achieved in advancing applications towards the stage of publication in the *Bulletin* and of the large amount of work carried out in connection with the preparation of the *Official List* for publication in book form. The scale of the increase witnessed may be judged by the fact that the total number of incoming letters handled (exclusive of the substantial number of letters addressed to the Trust on financial and administrative matters) increased in 1955 to 1600, an advance of 400 (33.3 per cent.) as compared with 1954 when the number of incoming letters amounted to 1200. Again, in 1955 the number of new cases registered in the Z.N.(S.) Series rose to 172 in 1955 as compared with 93 in 1954, an increase of 80 per cent. It is gratifying therefore to be able to record that as the result of the strict control applied in all departments of expenditure, total gross administrative expenses in 1955, which amounted to £1,488 8s. 3d., represented an advance of less than 14 per cent. as compared with 1954 (£1,307 13s. 7d.). Of the total increase of £180 14s. 8d. the sum of £55 11s. 11d. was in respect of salaries and the remainder (£125 2s. 9d.) in respect of general office expenses. The Audit Fee amounted to thirty guineas. The expenditure under the heading of salaries would have shown a larger advance if it had not been for the fact that the salary of the Research Assistant engaged during the year for work on the revised text of the *Règles* was met from the International Code (Publication) Suspense Account in the same way that the salary payable to the Research Assistant working on the *Official Lists* was met from the "Official List" Suspense Account both in 1954 and again in the year under review. The work of these Research Assistants, especially the latter, makes

an appreciable call upon the general expenses of the Office. Accordingly, the system under which subsidiary Accounts make a contribution to general office expenses was continued in 1955, the contribution from the first of the above Accounts being fixed at £15, while that in respect of the latter account, the services performed for which had shown a considerable increase during the year, was raised from £40 to £60. When regard is paid to this deduction, total net expenditure on general administration is seen to have amounted in 1955 to £1,413 8s. 5d., an increase of £145 14s. 10d. over the corresponding figure for 1954. It must not be supposed, however, that the expenditure described above represents the full amount which the Trust would be called upon to provide if the Office of the Commission was organised on normal commercial lines. For if the Office of the Commission were so organised, it would be necessary for the Trust to find the funds needed for renting and equipping the considerable amount of accommodation needed to house the staff of the Commission and its records and to provide a substantial salary for the zoologist in charge of the work. At present the Trust does not have to meet either of these charges, for Mr. Hemming provides office accommodation free of rent for the Office of the Commission in his private house and discharges the duties of Head of that Office on a whole-time basis without remuneration.

16. Depreciation of Office Equipment : During the year 1955 the sum of £17 9s. 4d. was appropriated towards depreciation of office equipment, this sum representing ten per cent of the value of this equipment at cost less allowances in respect of depreciation made in previous years. The corresponding item for 1954 was £19 8s. 2d.

17. Expenditure on printing Scientific Publications : During the year 1955 the sum of £3,661 17s. 9d. was expended on the printing of *Opinions*, *Declarations* and *Directions*, including summaries and indexes for volumes containing these publications. For the reasons already explained in paragraph 7 above, this expenditure was substantially less than the amount similarly expended in 1954 which amounted to £5,110 3s. 5d. In 1955 the expenditure incurred on the publication of the *Bulletin of Zoological Nomenclature* amounted to £1,032 17s. 6d. This was slightly less than the corresponding expenditure in 1954 (£1,210 15s. 11d.). Total expenditure on the printing of scientific publications in 1955 amounted therefore to £4,694 15s. 3d., or £1,626 4s. 1d. less than in 1954 when the sum similarly expended amounted to £6,320 19s. 4d.

18. Balance carried down, being Excess of Income over Expenditure in the year 1955 : It will be seen from the particulars given in the preceding paragraphs that in 1955 total income (£7,906 1s. 7d.) exceeded total expenditure (£6,125 12s. 10d.) by the sum of £1,780 8s. 9d., which therefore was carried

down. This is by far the largest surplus ever secured by the Trust and is highly gratifying as evidence of the growing importance attached by zoologists to the work of the Commission as reflected in the publications issued by the Trust.

19. Work carried out in 1955 in connection with the preparation of the "Official Lists" and "Official Indexes" for publication in book-form : In its Report for 1954 the Trust described how in the summer of that year it had decided to create a special post of Research Assistant to be held by a university graduate in zoology, whose duty it would be to devote the whole of her time to the preparation of the *Official Lists* and *Official Indexes* for publication in book-form. Miss D. N. Noakes, B.Sc. (London), who was appointed to this post, took up her duties in September 1954 and by the end of the year had made good progress, so far as concerns the entries made on these *Lists* and *Indexes* in the post-war period. The main difficulties, it was always realised, would arise in connection with the 563 entries made on the *Official List of Generic Names in Zoology* in the period up to the end of 1936, when the standard both of completeness and of accuracy in the entries made was far below that now required. It is this part of the task on which Miss Noakes was principally engaged in 1955. The volume of work involved will be apparent when it is realised that for each of the names concerned, it has been necessary (i) to ascertain the original reference for the name, (ii) to ascertain that that name is not a junior homonym of some other name, (iii) to ascertain what is the type species of the genus and under which of the Rules in Article 30 of the *Règles* the species in question became the type species, (iv) to examine the standard literature and, where necessary, consult with specialists with a view to ascertaining whether the nominal species which is the type species under the *Règles* is currently accepted as such by specialists in the group concerned and whether the name cited for the type species by the original author of the generic name is the oldest available name for that species, and (v) to determine the gender properly attributable to the generic name in question and to ascertain whether the gender so determined was the gender currently adopted for that name by specialists in the group concerned. For the purpose of this investigation the names entered on the *Official List* in the period in question were grouped by reference to the Classes in the Animal Kingdom to which the genera so named belong, this arrangement making it possible to minimise the amount of time required for searching the literature and also consult specialists in any given group simultaneously on any questions relating to the generic names in that group on which outside advice was required. The official attribution of genders to particular generic names represented an entirely new development and as regards this it was decided to issue questionnaires to specialists in each of the groups concerned. These were despatched in January 1955 and the replies received formed the foundation of the work done in this field later in the year. As regards the remaining matters requiring investigation a preliminary survey based on the material collected by Mr. Hemming in the period 1943-1946

was carried out for the purpose of estimating the amount of additional work requiring to be done in respect of the names of genera in each major group. In the light of this survey attention was then concentrated upon those groups for which the information available appeared most nearly complete. As and when the information available as regards some specified subject connected with names belonging to a particular group appeared to be complete, proposals on that subject were submitted to the Commission for decision. This procedure had the advantage that it made it possible to start obtaining decisions from the Commission on homogeneous groups of subjects with the minimum of delay. It had the further advantage also that it made it possible for the process of obtaining decisions and of embodying those decisions in *Directions* to proceed simultaneously with the further investigation in the Office of the Commission of outstanding problems relating to other subjects and other groups.

20. Analysis of the stage reached in the preparation of the "Official Lists" for publication in book form : In view of the importance of securing the publication at the earliest possible date of the volume containing the *Official Lists*, it was decided to give the highest priority in the Office of the Commission both to the issue of Voting Papers to the Commission on questions connected with this subject and to the preparation of *Directions* embodying the decisions taken by the Commission on the Voting Papers so issued. Under this policy no less than twenty-three Voting Papers on this subject were issued to the Commission during the year under review and the decisions taken on sixteen of these Voting Papers had been duly embodied in *Directions* by the end of the year. Of the twenty-three Voting Papers relating to the *Official Lists* which were dealt with by the Commission during the year, seven were concerned with the gender to be attributed to generic names ; three contained proposals for the admission to the *Official List of Specific Names in Zoology* of the specific names of the type species of genera, the names of which had been placed on the *Official List of Generic Names in Zoology* in the period up to the end of 1936 ; two contained proposals for the addition to the *Official List* or, as the case might be, to the *Official Index*, of the titles of books dealt with by the Commission during the same period ; three contained proposals on various miscellaneous questions on which decisions were required either to complete or to correct entries on the *Official List* and recommendations for the addition to the *Official Indexes of Rejected and Invalid Names* of names connected in one way or another with names placed on the *Official List* ; the remaining eight Voting Papers were all concerned with the rectification of major errors in individual entries made on the *Official List* in regard to particular names. The progress made in 1955 and the amount of work which remained to be done at the end of the year may be judged from the table given below. It must be appreciated, however, that matters on which decisions still require to be taken naturally include many of the most difficult and intractable of the problems involved in the revision of the entries made on the *Official List of Generic Names in Zoology* in the period up to the end of 1936.

Work carried out in 1955 on the revision of the entries on the
 "Official List of Generic Names in Zoology" in the
 period up to the end of 1936

Category	Decisions embodied in "Directions" rendered in 1955			Voted upon in 1955 but not embodied in "Directions" in 1955	Questions remaining to be decided
	Published (1)	Rendered but not Published (2)	Total Rendered (1) + (2) (3)		
(1) Determination of gender attributable to generic names	394	1	395	144	19
(2) Addition to <i>Official List of Specific Names in Zoology</i> of the names of type species of genera	78	183	261	91	200 ¹
(3) Determination of method by which type species were fixed (when not stated in <i>Opinion</i> concerned)	27	110	137	—	(estimate not available)
(4) Addition of invalid names to <i>Official Indexes</i>	60	80	140	65	150 ²
(5) Miscellaneous correc- tions of dates, etc.	4	25	29	4	(estimate not available)
(6) Addition to <i>Official Lists</i> of related names	40	12	52	2	(estimate not available)
Totals	603	411	1014	306	(estimate not available)

¹ The reason why for this item the sum of the figures shown in Columns (3), (4) and (5) amounts to 552, while the total number of generic names placed on the *Official List* in the period up to the end of 1936 amounted to 563 is that the specific names of the type species of eleven of the genera concerned had been placed on the *Official List of Specific Names in Zoology* in separate *Opinions* published in 1954.

² Estimated.

21. Expenditure incurred in 1955 in connection with the preparation of the "Official Lists" and "Official Indexes" for publication in book-form : During the year 1955 the sum of £520 3s. 1d. was expended on the preparation of the *Official Lists* and *Official Indexes* for publication in book-form. This expenditure was made up of two items, namely (1) salary of the Research Assistant in charge of this work, £460 3s. 1d. ; (2) contribution paid by the "Official List" Suspense Account to the general funds of the Trust in respect of common services provided from those funds to the work carried out in this field, £60. This expenditure was defrayed from the "Official List" Suspense Account.

22. Work carried out in 1955 in connection with the preparations for the publication of a draft of the "Regles" embodying the revisions adopted by the Paris and Copenhagen Congresses respectively : It will be recalled that at Copenhagen in 1953 a twofold arrangement was agreed upon in connection with the revision of the text of the *Règles* carried through by the Congress held in that city in that year and by the preceding Congress held in Paris in 1948. The first was concerned with the preparation of the first draft of a text containing the foregoing revisions, the second with the arrangements for the publication of the draft text when finally settled. The responsibility for the second of these tasks was offered to, and accepted by, the Trust. In preparation for the discharge of this duty the Trust decided in the summer of 1955 to set up a special Section under a Research Assistant to start work in this field. The duty entrusted to this Section was to prepare a detailed analysis of the amendments of, the additions to, and the deletions from, the text of the *Règles* made by the Paris and Copenhagen Congresses, in order that on the receipt of the draft text then in preparation the Trust might satisfy itself, before passing the document for publication, (a) that it contained all the decisions which had been taken by the foregoing Congresses and (b) that it contained no provisions which had not been so approved. Miss A. F. Kerr, M.A., (now Mrs. A. F. Wilson) was appointed to this post and took up her duties on 18th July 1955. By the end of the year Mrs. Wilson had completed the major part of the initial survey of the decisions taken by the Paris and Copenhagen Congresses.

23. Expenditure incurred in 1955 in connection with the preparations for the publication by the Trust of the draft of a revised text of the "Regles" : At the time of the establishment in 1955 of the "Règles" Section there already existed a Fund entitled the "International Code (Publication)" Suspense Account which had been built up in previous years for financing expenditure incurred in connection with the preparation and publication of a revised edition of the *Règles*. It was accordingly decided that the expenditure now to be met under this head should be charged to this Account. The total expenditure incurred in 1955 under this head amounted to £237 15s. 4d. This was made up as follows :—(1) Salary of Research Assistant and office expenses directly attributable to the work of this Section, £172 15s. 4d. ; (2) purchase of equipment

(typewriter), £50 ; (3) contribution paid by this Account to the general funds of the Trust in respect of common services provided from those funds to the work carried out in this field, £15. The balance remaining in this Account at the end of the year was £574 3s. 2d.

24. Transfer to the " Official List " Suspense Account made at the end of 1955 : At the end of 1955 both the " Official List " Suspense Account and the " International Code (Publication) " Suspense Account were in funds but the balance remaining in the first of these Accounts had been reduced to £115 18s. 5d. as the result of the expenditure incurred during the year. In order to put this Account into sufficient funds to enable it to meet the expenditure expected to be incurred in 1956, the sum of £420 was transferred to it at the end of 1955. Accordingly, the balance in that Account at the end of the year under review amounted to £535 18s. 5d.

25. Balance carried down : The balance at 31st December 1954 of the Trust's Income and Expenditure Account brought forward to 1955 amounted to £3,106 11s. 1d. At the end of the year 1955 this was increased by the excess of income over expenditure during the year (£1,780 8s. 9d.), which brought the total up to £4,886 19s. 10d. At the same time, however, it was necessary to make a deduction of £420 to take account of the transfer of a sum of that amount to the " Official List " Suspense Account (paragraph 24 above). Accordingly, at 31st December 1955 the sum brought forward to the Balance Sheet amounted to £4,466 19s. 10d.

26. Balance Sheet as at 31st December 1955 : At 31st December 1955 the Trust's total Revenue Reserves amounted to £5,100 14s. 11d. made up as follows :—(a) " Official List " Suspense Account, £535 18s. 5d. ; (b) Office Equipment Reserve, £97 16s. 8d. ; (c) Income and Expenditure Account Balance, £4,466 19s. 10d. Other items on this side of the Balance Sheet were (i) a sum of £574 3s. 2d., being the remaining balance of the provision made in previous years for meeting the cost of the revision of the *Règles Internationales* (International Code of Zoological Nomenclature), being the balance in the " International Code (Publication) " Suspense Account and (ii) liabilities to sundry creditors, £1,091 5s. 1d. As regards this latter item, all except about £100 was moneys owing to the printer for work in progress, mainly in respect of the printing of *Opinions*, which had been published towards the close of the year in respect of which accounts had not been rendered by the printers by 31st December. The items set out above amounted to £6,766 3s. 2d. On the other side of the Balance Sheet, the foregoing items were matched by (a) Fixed Assets entered at cost, less depreciation, £157 4s. 0d. ; (b) Current Assets amounting to £6,608 19s. 2d. This latter item was made up of two parts, of which the first was the sum of £1,050. This sum represented an estimate framed on conservative lines of the value of amounts due to the Trust in respect of the sales of its publications. This sum is considerably less than the corre-

sponding figure at the end of 1954 (£1,775), partly because the number of publications issued near the close of the year was substantially less in 1955 than it had been in 1954 and partly because of a special drive made by the Publications Officer to secure payment of certain accounts that were long overdue. The second part of the item "Current Assets" consisted of a sum of £5,558 19s. 2d., being the balance at the bank and cash in hand at 31st December 1955.

27. The situation disclosed by the Accounts for 1955 : Two lessons may be drawn from the situation disclosed by the Accounts for the year 1955. First, the marked increase in the sales of the Trust's publications as evidenced both by the increase in the number of subscribers and by the steady demand for complete sets of its publications from institutions which had not previously given active support to the work of the Commission is matter for great satisfaction, for it provides a reasonable assurance that, if it is possible every year to maintain a substantial output of publications, it should be possible to avoid financial loss and indeed to secure a modest surplus. Second, the need for adequate reserves was clearly demonstrated in 1955, for, although eventually (as the Accounts show) a substantial surplus was achieved, the various changes in the staff of the Office which took place during the year undoubtedly led for a time to some slowing down in the rate of output. The position of any organisation must be regarded as precarious when even slight adverse developments are liable to have an immediate effect of this kind. These considerations apply with especial force in the present instance in view of the fact that so large a part of the work can only be discharged by the Secretary, for no organisation can be regarded as possessing an assured position when the whole of its budget is based upon the assumption that means will be found to secure that in every year the output of new publications shall be sufficient to produce from sales an income large enough in the aggregate at least to cover essential overhead charges after meeting all production costs.

28. The further outlook : While for the reasons explained neither the immediate nor the longer-term outlook are free from dangers, the marked progress achieved in 1955—the greatest ever secured by the Trust in a single year—suggests that, if present policies are firmly adhered to, the total income of the Trust may rise within a reasonably near future to a level at which it should be possible to organise its work on normal commercial lines and to bring to end the situation which has existed for so long in which the Commission is able to continue in operation only through the subsidies of various kinds provided by its Secretary.

29. Staffing Developments in 1955 : The year 1955 was marked by various developments in the staffing of the Office of the Commission and the Trust. First, the Trust has to welcome the accession to its part-time staff of Professor the Rev. L. W. Grensted, M.A., D.D. (*Oriel College, Oxford*) who on 1st January

1955 took up duty as Consulting Classical Adviser, a new post which the Trust had judged it necessary to create in order to provide an assured source of expert advice on the many questions relating to the formation and gender of zoological names arising in the course of the work of the Commission. At the beginning of the year also Miss Joan Kelley, B.Sc., who for a number of years had acted as Official Indexer of the Commission's publications found it necessary to resign on account of the pressure of other duties. Throughout her tenure of this post she had discharged her duties to the complete satisfaction of the Trust which greatly appreciates the high standard of accuracy which she constantly maintained in her work. Miss Kelley was succeeded by Miss Mary Cosh, M.A., who very quickly mastered the intricate problems involved and has since produced two indexes of high merit. At the end of April the Trust suffered a severe loss through the retirement for family reasons of Mrs. S. C. Watkins, M.A., who had filled the post of Administrative Officer from its inception in November 1953 and who had been largely responsible for devising many of the internal office arrangements which had been necessitated by the great increase in the rate of output of work which began in 1954 and continued steadily thereafter. Mrs. Watkins's retirement took place somewhat earlier than had been expected and for a time the Office of the Commission might have been in considerable difficulties if it had not been for the way in which the remaining members of the staff stepped into the breach until a new appointment could be made. In June 1955 the Trust was fortunate in securing the services of Mrs. N. M. A. Guzelian in succession to Mrs. Watkins and she readily acquired a thorough knowledge of the duties of her post. In the autumn of 1955 it was decided to provide the Secretary with the services of a part-time shorthand writer in order to save part of the time which he had hitherto had to devote to the writing of letters and in November Mrs. Ilse Saltman was appointed to this post. The year 1955 was the second complete year in which the Office of the Commission and the Trust possessed a salaried staff and with the growing familiarity of its members with the nature of the work the productivity of the Office showed a marked increase with a corresponding benefit to its work. To some extent, however, these benefits were offset by changes in staff necessitated for one reason or another. Nevertheless, the staff was on balance much more experienced than it had been a year previously, each member being thoroughly conversant with the duties of her post.

30. Presentation of the Accounts for the Year 1955 and Balance Sheet as at 31st December 1955 : With the foregoing explanations, the Committee of Management has pleasure in presenting the Accounts for the year 1955 and the Balance Sheet as at 31st December 1955. In doing so, the Committee of Management desires to record its thanks to Mr. Francis Hemming, who in addition to discharging the heavy duties falling on him as Honorary Secretary to the International Commission, has, in his capacity as Honorary Managing Director and Secretary to the Trust, exercised a close and vigilant control over day-to-day expenditure. The Committee of Management desires also to express its warm thanks to all members of the staff at its Office in Park Village

East, every member of which has during the year rendered valuable services in her special department and who collectively contributed largely to the successful outcome of the year. At its Office in South Kensington Mrs. C. Rosner, its Publications Officer, has continued to render yeoman service and has been particularly successful both in securing new subscribers to the Trust's publications and in obtaining prompt payment of the sums due to the Trust in respect of sales. The Committee of Management is happy to have this opportunity of expressing its appreciation of the services rendered by the Trust's Printers, Messrs. Metcalfe & Cooper Ltd., who have consistently maintained a high standard of accuracy and of punctuality in the delivery of supplies. Mr. John Stainton who has been specially concerned on behalf of the above firm with the work of the Trust has shown great interest in the Trust's publications and has never failed to offer helpful suggestions whenever technical difficulties of any kind have arisen. Finally, the thanks of the Trust are due to its Auditors, Messrs. W. B. Keen & Co., Chartered Accountants and to their representative Mr. R. W. M. Taylor for assistance and advice rendered during the year.

Offices of the International Trust
for Zoological Nomenclature,
41 Queen's Gate,
London, S.W.7, England.

INTERNATIONAL TRUST F
Incorporated under the Compa
Balance Sho

1954					£ s. d.		£ s.	
£	£							
		<i>Revenue Reserves (per separate accounts)—</i>						
	636	"Official List" Suspense Account	...	...	535	18	5	
	98	Office Equipment Reserve	...	...	97	16	8	
	3,107	Income and Expenditure Account—Balance	...	...	4,466	19	10	
3,841	—						5,100	14
		<i>Provision for Cost of Revision of International Code—</i>						
		"International Code (Publication)" Suspense	...	...				
812		Account (per separate account)	...	...			574	3
		<i>Liabilities—</i>						
1,506		Sundry Creditors	...	...			1,091	5
<u>£6,159</u>							<u>£6,766 3</u>	

We have obtained all the information and explanations which to the best of our knowledge and belief from our examination of those books. We have examined the above Balance Sheet and accompanying In our information and according to the explanations given us, the said accounts give the information required b Trust's affairs at 31st December, 1955, and the Income and Expenditure Account gives a true and fair view o

FINSBURY CIRCUS HOUSE,
BLOMFIELD STREET,
LONDON, E.C.2.

28th February, 1956.

LOGICAL NOMENCLATURE

1929 (Limited by Guarantee)

December 1955

1954

	£			£	s.	d.	£	s.	d.
		<i>Fixed Assets—</i>							
		<i>Office Equipment—</i>							
112		Book Value at 1st July 1948	...	...	111	17	6		
186		Additions since at cost	...	...	186	3	3		
298					298	0	9		
123		Less: Depreciation	...	...	140	16	9		
175								157	4 0
		<i>Current Assets—</i>							
1,775		Amounts due for Publications, etc., Valued at	...	...	1,050	0	0		
4,209		Balance at Bank and Cash in Hand	...	...	5,558	19	2		
384								6,608	19 2
		(Note—Stock of Publications not valued)							

FRANCIS HEMMING	}	Members of the Committee
FRANCIS J. GRIFFIN		of Management.

159

£6,766 3 2

sary for the purposes of our audit. In our opinion proper books of account have been kept, so far as appears Expenditure Account, which are in agreement with the books of account. In our opinion and to the best of Companies Act 1948 in the manner so required, and the Balance Sheet gives a true and fair view of the state of the ss of Income over Expenditure for the year ended on that date.

(Signed) W. B. KEEN & CO.,

Chartered Accountants.

INCOME

1954									
£	£					£	s.	d.	£ s
		To	Sales of Publications—						
	5,704		Opinions and Declarations	...	...	5,691	10	6	
	2,225		Bulletin of Zoological Nomenclature	...	...	1,984	2	5	
			Copenhagen Decisions on Zoological Nomenclature	...	...				
	164					46	7	0	
8,093									7,721 19
32		"	Donations	...	...				5 10
		"	Grant from U.N.E.S.C.O. per the International Union for Biological Sciences	...	...				178 11

£8,268

660

2,847

£3,507

To Balance brought down 1,780

" Balance at 31st December 1954 brought forward 3,106 11

£7,906

1,780

3,106 11

£4,886 11

" Official L

To Transfer from Income and Expenditure Account 420

" Balance at 31st December 1954 brought forward 636

400

422

420

636

£822£1,056

Office

To Balance at 31st December 1954 brought forward £97 11

£98£97 11

" International Code

To Balance at 31st December 1954 brought forward 811 11

812

811 11

£812£811 11

Year ended 31st December 1955

1954	EXPENDITURE					
£			£	s. d.	£	s. d.
	By Administration Expenses—					
	Salaries—					
444	Administrative Officers	...	449	8	0	
333	Others	... ..	383	10	5	
777					832	18 5
499	Office Expenses	... ..			623	19 10
32	Audit Fee	... ..			31	10 0
1,308					1,488	8 3
	Less: Proportion allocated to					
40	"Official List"	...	60	0	0	
	Proportion allocated to					
	"International Code"	...	15	0	0	
40					75	0 0
1968					1,413	8 3
19	„ Depreciation of Office Equipment	... ..			17	9 4
	„ Publications—					
5,110	Opinions and Declarations	... ..	3,661	17	9	
1,211	Bulletin of Zoological Nomenclature	... ..	1,032	17	6	
6,321					4,694	15 3
	„ Balance carried down, being Excess of Income					
60	over Expenditure for year	... ..			1,780	8 9
6,381					£7,906	1 7
6,000	By Transfer to "Official List" Suspense Account					
6,007	„ Balance carried forward per Balance Sheet	...			4,466	19 10
6,007					£4,886	19 10
Suspense Account						
	By Expenditure during year—					
117	Salaries and Office Expenses	... ..	460	3	1	
29	Equipment	... ..				
40	Proportion of Administration Expenses	... ..	60	0	0	
186					520	3 1
186	„ Balance carried forward per Balance Sheet	...			535	18 5
186					£1,056	1 6
Reserve						
186	By Balance carried forward per Balance Sheet					
186					£97	16 8
" Suspense Account						
	By Expenditure during year—					
	Salaries and Office Expenses	... ..	172	15	4	
	Equipment	... ..	50	0	0	
	Proportion of Administration Expenses	... ..	15	0	0	
					237	15 4
12	„ Balance carried forward per Balance Sheet	...			574	3 2
12					£811	18 6



15 JUN 1956
PUBLISHED

12th June 1956

THE BULLETIN OF ZOOLOGICAL NOMENCLATURE

The Official Organ of
THE INTERNATIONAL COMMISSION ON
ZOOLOGICAL NOMENCLATURE

Edited by

FRANCIS HEMMING, C.M.G., C.B.E.

Secretary to the International Commission on Zoological Nomenclature

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(continued on back wrapper)

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1956

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INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

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President: Professor James Chester Bradley (*Cornell University, Ithaca, N.Y., U.S.A.*) (12th August 1953)

Vice-President: Senhor Dr. Afranio do Amaral (*Sao Paulo, Brazil*) (12th August 1953)

Secretary: Mr. Francis Hemming (*London, England*) (27th July 1948)

B. The Members of the Commission

(Arranged in order of precedence by reference to date of election or of most recent re-election, as prescribed by the International Congress of Zoology)

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Doc. Dr. Ferdinand Prantl (*Národní Museum v Praze, Prague, Czechoslovakia*) (30th October 1954)

Professor Dr. Wilhelm Kühnelt (*Zoologisches Institut der Universität, Vienna, Austria*) (6th November 1954)

Professor F. S. Bodenheimer (*The Hebrew University, Jerusalem, Israel*) (11th November 1954)

Professor Ernst Mayr (*Museum of Comparative Zoology at Harvard College, Cambridge, Massachusetts, U.S.A.*) (4th December 1954)

Professor Enrico Tortonese (*Museo di Storia Naturale "G. Doria," Genova, Italy*) (16th December 1954)

BULLETIN OF ZOOLOGICAL NOMENCLATURE

Volume 12, Part 1 (pp. 1—32)

12th June 1956

NOTICES PRESCRIBED BY THE INTERNATIONAL CONGRESS OF ZOOLOGY

The following notices are given in pursuance of decisions taken, on the recommendation of the International Commission on Zoological Nomenclature (see 1950, *Bull. zool. Nomencl.* 4: 51—56, 57—59), by the Thirteenth International Congress of Zoology, Paris, July 1948 (see 1950, *Bull. zool. Nomencl.* 5: 5—13, 131).

(a) Date of commencement by the International Commission on Zoological Nomenclature of voting on applications published in the "Bulletin of Zoological Nomenclature"

NOTICE is hereby given that normally the International Commission will start to vote upon applications published in the *Bulletin of Zoological Nomenclature* on the expiry of a period of six calendar months from the date of publication in the *Bulletin* of the applications in question. Any specialist who may desire to comment upon any of the applications published in the present Part (Vol. 12, Part 1) of the *Bulletin* is accordingly invited to do so in writing to the Secretary to the Commission, as quickly as possible and in any case, in sufficient time to enable the communication in question to reach the Secretariat of the Commission before the expiry of the six-month period referred to above.

(b) Notice of the possible use by the International Commission on Zoological Nomenclature of its Plenary Powers in certain cases

NOTICE is hereby given that the possible use by the International Commission on Zoological Nomenclature of its Plenary Powers is involved in applications published in the present Part of the *Bulletin of Zoological Nomenclature* in relation to the under-mentioned names:—

- (1) *Paradoxides* Brongniart, 1822, validation of; *Olenus* Dalman, [1827], designation of type species for, in harmony with accustomed usage; *paradoxus* Linnaeus, 1759, *Entomolithus*, suppression of; family-name PARADOXIDEN Emmrich, 1844 (wrongly based on *Olenus*) suppression of (Class Trilobita) (Z.N.(S.) 623);
- (2) *munda* Kuhl, 1820 (*Proc.ellaria*] and *Nectris*), suppression of (Class Aves) (Z.N.(S.) 704);

Notices prescribed by the International Congress of Zoology (*continued*)

- (3) *Daira* de Haan, [1833] (Class Crustacea, Order Decapoda), validation of (Z.N.(S.) 911) ;
- (4) *tuberculatus* Hall, 1859 (*Acidaspis*), validation of, and suppression of *Acanthaloma* Conrad, 1840 (Class Trilobita) (Z.N.(S.) 998) ;
- (5) *Theridion* Walckenaer, 1805 (Class Arachnida, Order Araneae), designation of type species for, in harmony with accustomed usage (Z.N.(S.) 1008) ;
- (6) *Protopeltura* Brögger, 1822 (Class Trilobita), designation of type species for, in harmony with accustomed usage (Z.N.(S.) 1034).

2. Comments received in sufficient time will be published in the *Bulletin* : other comments, provided that they are received within the prescribed period of six calendar months from the date of publication of the present Part will be laid before the International Commission on Zoological Nomenclature at the time of commencement of voting on the application concerned.

3. In accordance with the procedure agreed upon at the Session held by the International Commission on Zoological Nomenclature in Paris in 1948 (see 1950, *Bull. zool. Nomencl.* 4 : 56), corresponding Notices have been sent to the serial publications *Nature* and *Science*.

FRANCIS HEMMING

*Secretary to the International Commission on
Zoological Nomenclature*

28 Park Village East, Regent's Park,

LONDON, N.W.1, England.

12th June 1956.

**PROPOSED USE OF THE PLENARY POWERS TO SECURE THE
AVAILABILITY OF THE GENERIC NAMES "OLENUS" DALMAN,
[1827], AND "PARADOXIDES" BRONGNIART, 1822 (CLASS
TRILOBITA) FOR USE IN THE SENSE IN WHICH THESE NAMES
ARE CUSTOMARILY EMPLOYED**

By **CHRISTIAN POULSEN**

(Universitetets Mineralogisk-Geologiske Institut,
Mineralogisk Museum, Copenhagen, Denmark)

(Commission Reference : Z.N.(S.) 623)

The principal object of the present application is to ask the International Commission on Zoological Nomenclature to use its Plenary Powers to provide a valid basis for the continued use of the generic name *Olenus* Dalman, [1827] (Class Trilobita). A second but important part of the object of the present application is to provide a secure basis for the current usage of the generic name *Paradoxides* Brongniart, 1822, for the problems involved in connection with this name are inextricably intermingled with those which arise in connection with the name *Olenus* Dalman. This latter name is very well known, having been used for about one hundred years as the name for a guide fossil of the Upper Cambrian. This long sustained and universal usage has led to the use of such stratigraphical terms as "*Regio Olenorum*", "*Olenian*", "*Olenus* beds", "*Olenus* Series", "*Olenus*-Stufe", "*Olenus*-Étage", etc. From the systematic point of view also the name *Olenus* Dalman is of importance, for it has given its name to the family OLENIDAE. There can be no doubt whatever that the disappearance of the name *Olenus* in synonymy—as would be inevitable if the normal provisions of the *Règles* were to be applied in this case—would lead to immense confusion. Probably of equal importance to that of *Olenus*, the name *Paradoxides* is also one which it is highly desirable should be conserved, for it also has been in use for over a hundred years, for a well-known group of species from the Middle Cambrian. It has also been applied for stratigraphical terms such as "*Paradoxidian*", "*Paradoxides* beds", "*Paradoxides*-lagren", "*Paradoxides* Series", "*Paradoxides*-Stufe", etc. It is also the name of the type genus of the family PARADOXIDIDAE and is widely used in faunistic work to denote particular areas of distribution. The nomenclatorial issues involved in the present case are rather complicated and in addition there are bibliographical problems which call for consideration. Particulars are given below of those matters which are strictly relevant to the present application.

I. The Historical Background

2. Before examining the action taken by Brongniart when establishing the nominal genus *Paradoxides*, it is necessary clearly to note the distinction

between two nominal species established by Linnaeus under the same name, both of which enter into this problem. The first of these species was established by Linnaeus in 1753 (*Mus. tessin.* : 98, pl. iii, figs. 1, 2) under the name *Entomolithus paradoxus* in the form "*paradoxus*. 3. *Entomolithus Monoculi*". It should be noted that in the Tab. Explic. of this 1753 publication the words *Entomolithus Monoculi* appeared alone. As the name *paradoxus*, as used in the above publication, was published before the starting point of zoological nomenclature it possesses no status under the *Règles*. The species so named by Linnaeus was some sixty years later renamed by Wahlenberg (1821, *Nova Acta Soc. Sci. upsal.* 8 : 34) who called it *Entomostracites paradoxissimus*. (There is a problem as to the date to be assigned to Wahlenberg's paper, for a discussion of which see paragraph 3 below.) The second of the Linnean names concerned is *Entomolithus paradoxus* Linnaeus, 1759 (*K. Vetensk. Acad. Handl.*, Stockholm 20 : 19, fig. 1). This name has never subsequently been used for this species, presumably because the early workers considered that it was invalid as a junior homonym of *Entomolithus paradoxus* Linnaeus, 1753. In the paper referred to above (8 : 38) this species was identified by Wahlenberg with reserve with a new nominal species to which he gave the name *Entomostracites spinulosus*. Elsewhere however in the same paper (8 : 29) the same 1759 figure was with much less justification referred to *Entomostracites caudatus* (Brünnich, 1781). The name *paradoxus* Linnaeus, 1753, being a pre-1758 name does invalidate the name *paradoxus* Linnaeus, 1759, which is accordingly the oldest available name for the species concerned. In consequence the name *spinulosus* Wahlenberg habitually used for this species is an actual or possible junior subjective synonym of *paradoxus* Linnaeus, 1759. This question is further discussed in paragraph 12 below.

3. The next author who has to be considered is Wahlenberg. Before examining his treatment of this group it will be helpful if we dispose of the bibliographical problem which arises in connection with his paper entitled "*Petrificata Telluris Svecanae examinata a Georgio Wahlenberg*". This was the first paper to be published in volume 8 of the *Nova Acta Regiae Societatis Scientiarum upsaliensis* and is usually treated as having been published in 1821. There is evidence, however, to show that this paper was available earlier in pre-print form, for Dalman definitely states that it appeared in 1818, while Brongniart without stating when publication took place remarked that he himself did not have his attention drawn to this paper until 1819. In the circumstances the proper course appears to be to accept Dalman's explicit circumstances the proper course appears to be to attribute the new names in this paper of Wahlenberg's to 1821, the year in which that paper was first duly "published".

4. In the foregoing paper Wahlenberg realised that the nominal species established under the name *Entomolithus paradoxus* by Linnaeus in 1753 in his *Museum tessinianum* was a composite species and he gave a new name to the original of fig. 1 of the above publication and he referred either to new or to previously described nominal species the specifically unassigned species placed in *Entomolithus* in 1753 which later were illustrated by Linnaeus in his

1759 publication (*K. Vetensk.-Akad. Handl.*, Stockholm 20 : pl. 1, figs. 2—4). At the same time he established for these species the nominal genus *Entomostracites* ([1821], *Nova Acta Soc. Sci. upsal.* 8 : 25) for the species so named. Wahlenberg's *Entomostracites* was not looked upon by him as a new genus, being published as a substitute name (*nom. nov.*) for the name *Entomolithus* Linnaeus, 1759 (*K. Vetensk. Akad. Handl.*, Stockholm 20 : 19). He also rejected the specific name *paradoxus* Linnaeus, 1753, as published in the combination *Entomolithus paradoxus*, giving to the species concerned the new name *Entomostracites paradoxissimus* (*loc. cit.* 8 : 34, pl. 1, fig. 1), and he illustrated a most perfect specimen. In the same paper he gave the name *Entomostracites gibbosus* (*loc. cit.* 8 : 39) to one of the components of the genus *Entomolithus* of Linnaeus of 1759, again illustrating better material. Finally, as already noted (paragraph 2 above) he gave the name *Entomostracites spinulosus* (*loc. cit.* 8 : 38) to a species which he identified with reserve with that to which in 1759 Linnaeus had applied the name *Entomolithus paradoxus*.

5. We must now consider the generic name *Paradoxides* published by Brongniart in 1822 (*Paradoxides* Brongniart (A.), in Brongniart & Desmarest, *Hist. nat. Crust. foss.* : 31, 30). Owing to the confused and confusing manner in which this name was introduced and the differences of opinion regarding the species to be accepted as the type species of this genus which have in consequence arisen it is necessary to examine closely the action taken by Brongniart. We have first to note that, when erecting the nominal genus *Paradoxides*, Brongniart divided it into two sections. In the first of these sections he placed (i) a new nominal species *Paradoxides tessini* (*loc. cit.* : 31) (to which it will be necessary to revert a little later), (ii) *Entomostracites spinulosus* Wahlenberg (8 : 38) and (iii) *Entomostracites scarab[ae]oides* Wahlenberg (8 : 41). In the second of these sections he placed (i) *Entomostracites gibbosus* Wahlenberg and (ii) *Entomostracites laciniatus* Wahlenberg (8 : 34). On the general scope of his genus *Paradoxides* Brongniart wrote as follows (: 30) :—

... renferme les espèces de la famille des Trilobites, qui ont été décrites par Linné, sous le nom d'*Entomolithus paradoxus* [i.e. the species so named by Linnaeus, in 1753 in the *Mus. tess.*], nom qu'on a étendu, comme je l'ai dit, à des animaux que le naturaliste suédois n'avait pas eu en vue, et qu'il n'avait pas même connus. C'est pour respect pour lui et pour rappeler que c'est ici le véritable *Entomolithus paradoxus* que j'ai donné à ce genre le nom de *Paradoxide* [this French version of the name being Latinised by Brongniart as *Paradoxides* on page 31], nom peut-être un peu singulier, mais que rappelle, comme l'avait voulu Linné, les formes singulières de ces animaux.

6. It is necessary now to consider the nominal species *Paradoxides tessini* which, as already noted, was established by Brongniart in the foregoing paper. On page 31 of his paper Brongniart described Wahlenberg's species *Entomostracites paradoxissimus* and reproduced, as fig. 1 on plate iv, the figure given by Wahlenberg for this species. Both in this description and on the

legend of his pl. iv Brongniart applied to this species the new name *Paradoxides tessini*. This entry was accompanied by the following footnote: "*Entomostracites paradoxissimus*, Wahl. no. 9, tab. I, fig. 1. *Entomolithus paradoxus*, Linn., Mus. tess., tab. III, fig. 1 (pessima)". On the following page (: 32) in a further discussion of his species *Paradoxides tessini*, Brongniart observed: "Malgré l'imperfection de la figure de l'Entomolithe décrit par Linné dans le muséum de Tessin, nous ne pouvons douter, en la comparant à celle de M. Wahlenberg, que Linné n'ait décrit le même animal. M. Wahlenberg n'en doute pas non plus, puisqu'il donne cet Entomolithe du *Museum Tessinianum*, comme synonyme du sien". It is thus evident that the name *tessini* Brongniart, like *paradoxissimus* Wahlenberg, is a substitute name for *paradoxus* Linnaeus, 1753 (*Mus. tess.*), as published in the combination *Entomolithus paradoxus*. The name *tessini* Brongniart is therefore invalid as being a junior objective synonym of *paradoxissimus* Wahlenberg.

7. The next name which has to be considered is the generic name *Olenus* Dalman (*K. Vetensk-Acad. Handl.*, Stockholm 1826 (1) : 150). The paper in which this name was published formed part of the volume for the year 1826 but was not actually published until 1827, to which year therefore the name *Olenus* Dalman should be attributed. In this paper Dalman discussed a number of names published by previous authors and took exception to them on various grounds. In the present case he proposed the name *Olenus* expressly as a substitute name for the name *Paradoxides* Brongniart. The name *Olenus* is therefore a junior objective synonym of the name *Paradoxides* Brongniart.

8. There is one other generic name which has to be considered in this connection. This is *Parabolina* Salter, 1849 (*Mem. geol. Surv. United Kingd.*, Figures, Decade 2 : pl. ix, page 2 of expl.). The type species of this genus (by monotypy) is *Entomostracites spinulosus* Wahlenberg, [1818], which, as we have seen (paragraph 4 above), is a nominal species, the author of which identified with reserve with that to which in 1759 (*nec* 1753) Linnaeus gave the name *Entomolithus paradoxus*.

II. Discussion of the nomenclatorial issues involved

9. The generic name "*Entomostracites*" Wahlenberg, 1821 : The nominal genus *Entomostracites* was established by Wahlenberg as a substitute for the name *Entomolithus* Linnaeus, 1759, and comprised fourteen species, including those involved in the present case. Since no type species was designated for either of these genera by Wahlenberg and none has been selected by any subsequent author, any of the species originally included by Linnaeus could be selected as type species. So long as the name *Entomolithus* Linnaeus, 1759, retains its status of availability, it constitutes a serious potential threat under the Law of Priority both to the name *Paradoxides* Brongniart and to the name *Olenus* Dalman. The name *Entomolithus* Linnaeus has not been

used for over a century, and its re-introduction at the present time would be bound to give rise to serious confusion and would be open to the strongest objection. Accordingly, as a first step in the stabilisation of the nomenclature of this group, the name *Entomolitus* Linnaeus should be suppressed by the International Commission under its Plenary Powers, being then placed on the *Official Index of Rejected and Invalid Generic Names in Zoology*. The substitute name *Entomostracites* Wahlenberg, 1821, should at the same time be suppressed by the International Commission under its Plenary Powers for it also has not been used for over one hundred years and its re-introduction would cause fully as great confusion as would the resurrection of the older name *Entomolitus* Linnaeus, 1759. Another name which has been considered, namely *Entomolithus* Gesner, 1758 (*Tract. Petrif.* : 57), is fortunately already invalid, the Commission having suppressed for nomenclatorial purposes in *Opinion* 230 (1954, *loc. cit.* 4 : 231—238) the work in which it was published. No action now requires therefore to be taken by the Commission in regard to this name beyond placing it also on the *Official Index*.

10. Type species of the genus "Paradoxides" Brongniart, 1822 : Under a decision recently taken by the International Commission and since embodied (as I am informed by Mr. Hemming, Secretary to the Commission) in *Declaration* 22 (now in the press)¹ Rule (a) in Article 30 of the *Règles* (Rule relating to the designation of a type species for a genus by the original author of the generic name) is, like Rule (g) (selection of a type species by a later author) to be "rigidly construed". In these circumstances it is evident that Brongniart cannot be regarded as having designated a type species for his genus *Paradoxides*, for, although he clearly erected this genus for "le véritable *Entomolithus paradoxus*" of Linnaeus, 1753, he placed other nominal species in this genus and did not explicitly designate any of the included species as the type species. It is necessary therefore to examine the literature to determine which of Brongniart's included nominal species was first selected as the type species of *Paradoxides* by a later author. The first author expressly to deal with this subject was Barrande who in 1852 (*Syst. silur. Centre Bohême* 1 : 362) wrote as follows: "Alex. Brongniart fonde le genre *Paradoxides* pour renfermer les espèces décrites par Linné sous le nom d'*Entomolithus paradoxus* [Barrande's italics]. Il prend pour type, avec le nom de *Parad. tessini*, la forme nommée *Ent. paradoxissimus* par Wahlenberg, dont il reproduit la figure . . .". Barrande's statement in this passage that Brongniart designated a type species for his genus *Paradoxides* was, as we have seen, incorrect. At this point, however, it is necessary to recall the decision by the Thirteenth International Congress of Zoology, Paris, 1948 that "an author is to be treated as having selected a given nominal species to be the type species of a given nominal genus . . . when he does no more than state that a specified such species is the type species of the nominal genus concerned, irrespective . . . of whether he states or implies, either correctly

¹ *Declaration* 22, which is now in page proof will be published shortly as Part 12 of Volume 12 of the *Opinions and Declarations Series*.

or otherwise, that that nominal species had been selected by some previous author to be the type species of that nominal genus . . . , provided in such a case that the author concerned makes it clear that he himself accepts, for whatever reason, the species in question as the type species of the genus concerned" (1950, *Bull. zool. Nomencl.* 4 : 181—182). Applying the foregoing provision to the present case, we find that, although Barrande was in error when he stated that Brongniart had himself designated *Paradoxides tessini* Brongniart as the type species of *Paradoxides*, his own action in accepting that species as the type species of that genus constitutes under the *Règles* a valid selection by himself of that species as the type species of *Paradoxides*. Since *Paradoxides tessini* Brongniart, 1822, is a junior objective synonym of *Entomostracites paradoxissimus* Wahlenberg, 1821, both of which names were cited by Barrande when making the type selection described above and also by Brongniart when establishing the genus *Paradoxides*, Barrande is, under *Declaration* 21 (now in the press)² to be treated as having selected the type species of this genus under the name *paradoxissimus* rather than under that of its junior objective synonym *tessini*. The foregoing type selection is in complete harmony with the current usage of the name *Paradoxides*. The original specimen of Wahlenberg's restored illustration of *Entomostracites paradoxissimus* (1821 : pl. 1, fig. 1) is preserved in the Palaeozoological Department of the Naturhistoriska Riksmuseet, Stockholm, where it bears the Registered Number Ar. 46147. It was re-figured in 1953 by A. H. Westergård (*Sver. Geol. Unders.* (Ser. C) No. 520 : pl. viii, fig. 2). This specimen is hereby selected as the lectotype of the nominal species *Entomostracites paradoxissimus* Wahlenberg, 1821. The Commission is now asked to place the generic name *Paradoxides* Brongniart, 1822, on the *Official List of Generic Names in Zoology* with *Entomostracites paradoxissimus* Wahlenberg, 1821, as type species by selection by Barrande (1852).

11. Type species of the genus "Olenus" Dalman, [1827] : As has already been explained (paragraph 7 above) the name *Olenus* Dalman, [1827], is no more than a substitute name for the name *Paradoxides* Brongniart, 1822. As such, it takes automatically as its type species the same species as that which is the type species of the genus *Paradoxides*. Accordingly, under the *Règles* the type species of *Olenus* Dalman is *Entomostracites paradoxissimus* Wahlenberg and the name *Olenus* Dalman falls as a junior objective synonym of *Paradoxides* Brongniart. For the reasons explained in the opening paragraph of the present application such a disposal of the name *Olenus* Dalman would give rise to the greatest possible confusion and some means must be found for preventing this situation from arising. This end can only be achieved by the use by the International Commission of its Plenary Powers to designate as the type species of this genus a species in harmony with current usage, and this is accordingly the action which the Commission is now asked to take. The species most suitable for designation as the type species of this genus is *Entomostracites gibbosus* Wahlenberg, 1821 (discussed in paragraph 4 above).

² *Declaration* 21, which is now in page proof, will be published shortly as Part 11 of Volume 12 of the *Opinions and Declarations Series*.

The generic name *Olenus*, Dalman, [1827], so stabilised should be placed on the *Official List of Generic Names in Zoology* and the name *gibbosus* Wahlenberg, 1821, as published in the combination *Entomostracites gibbosus*, should be placed on the *Official List of Specific Names in Zoology*.

12. Name for the type species of the genus "Parabolina" Salter, 1849 : As has already been explained (paragraph 8 above) the type species of this genus is the nominal species *Entomostracites spinulosus* Wahlenberg, 1821. This species has always been known by this name, but as explained in paragraph 4, it may be only a junior subjective synonym of the much older name *paradoxus* Linnaeus, 1759, as published in the combination *Entomolithus paradoxus*, a name, however, which has never been used by any author since the time of Linnaeus. On the ground of the need for maintaining continuity in nomenclature it would be most objectionable if a long-neglected name such as *paradoxus* Linnaeus, 1759, were to be substituted for the name *spinulosus* Wahlenberg which has been in use for over a hundred years. In the present case there is a further, and even more potent reason why such a substitution should be avoided. For the name *paradoxus* Linnaeus, 1759, was rejected by the zoologists of the day because it was a homonym of the name *paradoxus* Linnaeus, 1753, published in the same combination (i.e. the name applied by Linnaeus to the species, of which now the oldest available name is *paradoxissimus* Wahlenberg, 1821) and, while it is true that under the *Règles* this objection no longer holds good—in view of the fact that the name *Entomolithus paradoxus* Linnaeus, 1753, possesses no status of availability because of having been published before the starting point of zoological nomenclature (as defined by Article 26 of the *Règles*)—the re-introduction in this group of a specific name consisting of the word "*paradoxus*" could not fail to give rise to the most serious confusion. These objections are greatly heightened by the fact that it is not clearly established that the nominal species *Entomolithus paradoxus* Linnaeus, 1759, and *Entomostracites spinulosus* Wahlenberg, 1821, represent the same taxonomic unit, with the result that, so long as the name *paradoxus* Linnaeus, 1759, retains the status of availability, there will be a risk that the species concerned will be called by the name *spinulosus* Wahlenberg by some specialists and by the name *paradoxus* Linnaeus by other workers. The International Commission is accordingly asked to prevent this confusion from arising by using its Plenary Powers to suppress the name *paradoxus* Linnaeus, 1759, thus making the familiar name *spinulosus* Wahlenberg, 1821, unquestionably the oldest available name for the species concerned. As part of this arrangement the Commission is asked to place the foregoing name so protected on the *Official List of Specific Names in Zoology* and at the same time to place the generic name *Parabolina* Salter, 1849, with the above species as type species, on the *Official List of Generic Names in Zoology*.

13. Other action in regard to generic and specific names required : In addition to the action recommended in paragraphs 10, 11 and 12 above, the following action in relation to generic and specific names is required in order to dispose of all matters in regard to such names involved in the present case :

(1) The following invalid generic names should be placed on the *Official Index of Rejected and Invalid Generic Names in Zoology*: (a) *Olenus* Dejean, 1835, *Cat. Coléopt. Coll. Dejean* (1835 Ed.): 439 (a *nomen nudum*); (b) *Olenus* Thomson, 1857, *Arch. ent. Paris* 1 : 157 (a name for a genus of the Order Coleoptera (Class Insecta) which is a junior homonym of *Olenus* Dalman, [1827], one of the generic names dealt with in the present application, and which has as such been replaced by the name *Balius* Guérin, 1857, in Thomson, *Arch. ent. Paris* 1 : 261); (c) *Paradoxides* Motschulsky, 1851, *Bull. Soc. imp. Nat. Moscou* 24(2) : 510 (a name for a genus of the Order Psocoptera (Class Insecta) which is a junior homonym of *Paradoxides* Brongniart, 1822 (one of the generic names dealt with in the present application) and which, as such, has been replaced by the generic name *Paradoxenus* Motschulsky, 1853, *Etudes ent.* 1 : 19); (d) *Paradoxites* Goldfuss, 1843, *Neues Jahrs B. f. Min.* 1843 : 347 (an Invalid Emendation of *Paradoxides* Brongniart, 1822); (2) the following invalid specific name should be placed on the *Official Index of Rejected and Invalid Specific Names in Zoology*: *tessini* Brongniart, 1822, as published in the combination *Paradoxides tessini* (see paragraph 5 above).

14. Family-group-name problems : As explained in the opening paragraph of the present application, the generic names *Paradoxides* Brongniart and *Olenus* Dalman are both type genera of families. The family names concerned should be placed on the *Official List of Family-Group Names in Zoology* at the same time that the foregoing generic names are placed on the *Official List of Generic Names in Zoology*. The generic name *Olenus* Dalman was taken by Burmeister (H.), in 1843 (*Die Organisation der Trilobiten*, Berlin : 47) as the base for the family-group name OLENIDAE. In erecting this nominal unit, Burmeister recognised *Paradoxides* as a genus distinct from *Olenus*. The generic name *Paradoxides* was first taken as the base for a family-group name by Emmrich (H.[F.]) in 1844 (*Zur Naturgeschichte der Trilobiten, Program zur öffentlicher Prüfung . . .* Meiningen : 17), who introduced the name PARADOXIDEN as the name for a subfamily. Emmrich, however, gave as examples of the genus *Paradoxides* only *P. gibbosus* and *P. latus*, both species which nowadays are referred to the family OLENIDAE; further, he took (: 18) *O. tessini* to represent the genus *Olenus* in his family OLENEN. It would thus be misleading and historically incorrect to treat Emmrich as having established the family PARADOXIDIDAE as correctly typified by *Entomostracites paradoxissimus* Wahlenberg, the type species of its type genus. I accordingly ask the International Commission to use its Plenary Powers to suppress the family-group name PARADOXIDEN Emmrich, 1844, for the purposes both of the Law of Priority and of the Law of Homonymy. This action will clear the ground for the acceptance of the family-group name PARADOXIDES introduced for use in the correct sense by Corda (A.J.C.) in 1847 (*in* Hawle (I.) & Corda (A.J.C.) *Prodrom einer Monographie der böhmischen Trilobiten* : 11). In this work Corda established a number of new families, the names of which he formed by adding the termination "-ides" to what he regarded as the root (or the stem) of the generic name concerned. In the case of the family-group name based upon the generic name *Paradoxides* the resulting family-group name, as formed

by Corda, was PARADOXIDES. In the family so established Corda placed nineteen genera, including the genus *Paradoxides* in which he placed seven species. So far as is known, the generic name *Parabolina* Salter, 1849, has not been taken as the base for a family-group name.

Recommendations

15. For the reasons set forth in the present application the International Commission is now asked :—

(1) to use its Plenary Powers :—

(a) to suppress the under-mentioned names for the purposes of the Law of Priority but not for those of the Law of Homonymy :—

(i) the generic name *Entomolithus* Linnaeus, 1759 ;

(ii) the generic name *Entomostracites* Wahlenberg, 1821 ;

(iii) the specific name *paradoxus* Linnaeus, 1759, as published in the combination *Entomolithus paradoxus* ;

(b) to suppress the family-group name PARADOXIDEN Emmrich (H.[F.]), 1844 (type genus : *Paradoxides* Brongniart, 1822, as based upon an erroneously determined type species) for the purposes both of the Law of Priority and of the Law of Homonymy ;

(c) to set aside all designations or indications of type species for the genus *Olenus* Dalman, [1827], made prior to the Ruling now asked for and, having done so, to designate the nominal species *Entomostracites gibbosus* Wahlenberg, 1821, to be the type species of the above genus ;

(2) to place the under-mentioned generic names on the *Official List of Generic Names in Zoology* :—

(a) *Paradoxides* Brongniart, 1822 (gender : masculine) (type species, by selection by Barrande (1852) : *Entomostracites paradoxissimus* Wahlenberg, 1821, as defined by the lectotype selection made in paragraph 10 of the present application) ;

(b) *Olenus* Dalman, [1827] (gender : masculine) (type species, by designation under the Plenary Powers under (1)(c) above : *Entomostracites gibbosus* Wahlenberg, 1821) ;

(c) *Parabolina* Salter, 1849 (gender : feminine) (type species, by monotypy : *Entomostracites spinulosus* Wahlenberg, 1821) ;

(3) to place the under-mentioned specific names on the *Official List of Specific Names in Zoology* :—

- (a) *gibbosus* Wahlenberg, 1821, as published in the combination *Entomostracites gibbosus* (specific name of type species of *Olenus* Dalman, [1827]) ;
- (b) *paradoxissimus* Wahlenberg, 1821, as published in the combination *Entomostracites paradoxissimus*, defined as specified in (2)(a) above (specific name of type species of *Paradoxides* Brongniart, 1822) ;
- (c) *spinulosus* Wahlenberg, 1821, as published in the combination *Entomostracites spinulosus* (specific name of type species of *Parabolina* Salter, 1849) ;

(4) to place the under-mentioned generic names on the *Official Index of Rejected and Invalid Generic Names in Zoology* :—

- (a) *Entomolithus* Gesner, 1758 (a name published in a work suppressed for nomenclatorial purposes under the Plenary Powers) ;
- (b) *Entomolithus* Linnaeus, 1759, as suppressed under the Plenary Powers under (1)(a)(i) above ;
- (c) *Entomostracites* Wahlenberg (G.), 1821, as suppressed under the Plenary Powers under (1)(a)(ii) above ;
- (d) *Olenus* Dejean, 1835 (a junior homonym of *Olenus* Dalman, [1827]) ;
- (e) *Olenus* Thomson, 1857 (a junior homonym of *Olenus* Dalman, [1827]) ;
- (f) *Paradoxides* Motschulsky, 1851 (a junior homonym of *Paradoxides* Brongniart, 1822) ;
- (g) *Paradoxites* Goldfuss, 1843 (an Invalid Emendation of *Paradoxides* Brongniart, 1822) ;

(5) to place the under-mentioned specific names on the *Official Index of Rejected and Invalid Specific Names in Zoology* :—

- (a) *paradoxus* Linnaeus, 1759, as published in the combination *Entomolithus paradoxus*, as suppressed under the Plenary Powers under (1)(a)(ii) above ;
- (b) *tessini* Brongniart, 1822, as published in the combination *Paradoxides tessini* (a junior objective synonym of *paradoxissimus* Wahlenberg, 1821, as published in the combination *Entomostracites paradoxissimus*) ;

(6) to place the under-mentioned family-group names on the *Official List of Family-Group Names in Zoology* :—

(a) OLENIDAE Burmeister, 1843 (type genus : *Olenus* Dalman, [1827]) ;

(b) PARADOXIDIDAE (correction of PARADOXIDES Corda (A.J.C.), 1847 (type genus : *Paradoxides* Brongniart, 1822) ;

(7) to place the under-mentioned family-group names on the *Official Index of Rejected and Invalid Family-Group Names in Zoology* :—

(a) PARADOXIDEN Emmrich (H.[F.]), 1844 (type genus : *Paradoxides* Brongniart, 1822), as suppressed under the Plenary Powers under (1)(b) above ;

(b) PARADOXIDES Corda (A.J.C.), 1847 (type genus : *Paradoxides* Brongniart, 1822) (an Erroneous Original Spelling for PARADOXIDIDAE).

16. I should like to take this opportunity to thank my friend Dr. C. J. Stubblefield, F.R.S., of the Geological Survey of Great Britain for the assistance which he has kindly given in clearing up, on my behalf, a number of bibliographical and other matters on which information was asked for by the Secretary to the Commission in the course of the preparation of the present application.

**SUPPLEMENTARY APPLICATION RELATING TO THE GENERIC NAME
"OSMERUS" LINNAEUS, 1758 (CLASS ACTINOPTERYGII)**

By **FRANCIS HEMMING**, C.M.G., C.B.E.,

Secretary to the International Commission on Zoological Nomenclature

(Commission Reference : Z.N.(S.) 564)

(For the application in this case see *Bull. zool. Nomencl.* 11 : 281—282)

When I recently submitted to the International Commission proposals for the rectification of an error in *Opinion* 77 relating to the generic name *Osmerus* Linnaeus, 1758 (Class Actinopterygii) I found it necessary to report that I was not then in a position to submit a recommendation on the family-group-name aspect of that case. I added that I would do so in due course.

2. In the interval which has since elapsed I have had an opportunity of investigating this matter with the assistance of Mr. Denys W. Tucker, B.Sc. (*Department of Zoology, British Museum (Natural History), London.*

3. It appears that the first time that the word OSMERIDAE appeared in print was in 1913 in the volume of the *Zoological Record* for the year 1912 (49 : Pisces 35). The editor of the Pisces section of the *Zoological Record* at that time was C. T. Regan and it must be assumed that it was he who was responsible for the introduction of this at that time unpublished family name as a heading in the Pisces section of this literature-recording serial. The only requirement, apart from due publication, required to provide a family-group name with the status of availability is that it should be based upon the name of its type genus. While there cannot be any doubt that the name OSMERIDAE as used by Regan in the *Zoological Record* was based upon the generic name *Osmerus* Linnaeus, the fact that this was not so stated by Regan on this occasion—and in view of the circumstances in which this name was published could hardly have been stated—must be taken as invalidating this name as published in the manner discussed above. That this is so must be regarded as satisfactory, for no more unsuitable place in which to publish a new name than the *Zoological Record* could be imagined.

4. The next occasion when the name OSMERIDAE appeared was again in 1913 and once again Regan was the author. This was in a paper entitled "The Antarctic Fishes of the Scottish National Antarctic Expedition" (*Trans. Roy. Soc. Edinb.* 49 : 290).

5. In order to complete the action needed to correct and amplify the Ruling given in *Opinion* 77, it is recommended that the International Commission on Zoological Nomenclature should :—

- (1) place the under-mentioned family-group name on the *Official List of Family-Group Names in Zoology* :—OSMERIDAE Regan (C.T.), 1913 (reference as in paragraph 4 above) (type genus : *Osmerus* Linnaeus, 1758) ;
- (2) place the under-mentioned family-group name on the *Official Index of Rejected and Invalid Family-Group Names in Zoology* :—OSMERIDAE Regan (C.T.), 1913 (reference as in paragraph 3 above) (invalid because not accompanied by a statement as to the name of the type genus of the family-group taxon so named).

**SUPPORT FOR DR. L. B. HOLTHUIS'S PROPOSAL RELATING
TO THE GENERIC NAME "PAGURUS" FABRICIUS, 1775 (CLASS
CRUSTACEA, ORDER DECAPODA)**

By **JANET HAIG**

(*University of South California, Los Angeles*)

(Commission Reference : Z.N.(S.) 859)

(For the proposal submitted see 1955, *Bull. zool. Nomencl.* **11** : 307—321)

(Letter dated 6th April, 1956)

I wish to register with the Commission my support of the discussion and proposal of L. B. Holthuis, which forms Part III (paragraphs 23—26) of his joint application with J. Forest for a decision regarding the status of the generic name *Pagurus* Fabricius, 1775 (*Bull. zool. Nomencl.* **11** : 307—321, 1955).

The facts of the case as stated in Part I of this proposal (pp. 307—313), and as earlier set forth by Walton and Stevens (*Bull. S. Calif. Acad. Sci.* **54** : 40—42, 1955), make it clear that "Solution I" of the proposal, that advocated by Holthuis, is correct according to the strict application of the International Rules of Zoological Nomenclature. Adoption of "Solution III" (: 310), advocated by Forest, would necessitate the use of the Plenary Powers of the Commission to suppress the generic name *Pagurus* Fabricius, 1775.

I agree with Holthuis that it would be undesirable to suppress a name which is in common use for the type genus of a family and other categories and which is the root of many genera of hermit crabs, and that to follow this course would not necessarily solve the problem of the ambiguity attached to the name. Furthermore, as Forest suggests in Part II of the joint application (paragraphs 18—22), should the Commission suppress *Pagurus* Fabricius, 1775, it might at the same time find it necessary to suppress the name PAGURIDAE for the family. This, in my opinion, would be a most unfortunate result if Forest's solution of the problem should be adopted.

For the foregoing reasons I should prefer to see the adoption by the Commission of "Solution I" (: 310) as advocated by Holthuis.

**PROPOSED USE OF PLENARY POWERS TO SUPPRESS THE
SPECIFIC NAME "MUNDA" KUHL, 1820, AS IN THE COMBINA-
TIONS "PROC[ELLARIA] MUNDA" AND "NECTRIS MUNDA"
(CLASS AVES)**

By W. B. ALEXANDER

(*Edward Grey Institute of Field Ornithology, Oxford, England*)

R. A. FALLA

(*Dominion Museum, Wellington, New Zealand*)

C. A. FLEMING

(*Wellington, New Zealand*)

R. C. MURPHY

(*American Museum of Natural History, New York, U.S.A.*)

and

D. L. SERVENTY

(*Commonwealth Scientific and Industrial Research Organisation,
Perth, Australia*)

(**Commission Reference : Z.N.(S.) 704**)

During Cook's first voyage (1769-1770), Joseph Banks, in his manuscript diary preserved in the Alexander Turnbull Library, Wellington, New Zealand, used the name *Nectris munda* for sea-birds, presumably shearwaters, observed at sea in the South Pacific Ocean. Solander prepared a detailed description of *Nectris munda*, quoting two localities, one in the eastern South Pacific, off Chile, the other off the New Zealand coast, but this description was not published until 1912 (Mathews, *Birds Austr.* 2 : 59).

2. Kuhl (1820, *Beitr. Zool. Vergl. Anat.* 1(2) : 148) published the name *Proc. munda*, with *Nectris munda* Banks as a synonym, with a reference to an unpublished figure of Banks and the following brief description :—

"Cauda brevis, cuneiformi alis cauda aliquantum brevioribus. Unguibus falcatis. Magnitudine Perdix.—The beak blue-grey towards the back and the point black, the legs and feet the same colour as in the *Procell. cyanopedo*—25 Febr. 1769. Lat. 48.27 ; longitudo 93. Banks."

3. *Procell. cyanopedo* is a *nomen nudum*; the figure of Banks referred to is an unpublished outline pencil sketch by Parkinson, itself considered indeterminate by Salvin (1876).

4. The following is a brief summary of the subsequent history of Kuhl's nominal species *Nectris munda* :—

1868–1869 : Giglioli & Salvadori (*Atti. Soc. ital. Sci. nat.* 11 : 457 and 1869, *Ibis* (7) 2 : 68) described *Puffinus elegans* from the South Atlantic Ocean, stating that the only form with which it might be identified was *Puffinus mundus* (Kuhl) ("*Nectris munda* Banks") but that the only available diagnosis was too brief and incomplete to depend on (i.e. they considered *munda* indeterminate).

1876 : Salvin (Rowley's *Ornith. Misc.* 1 : 256), after looking carefully at the Parkinson drawing and Solander's manuscript note attached to the name *munda*, saw "little chance, from such incomplete materials, of coming to any decision respecting it", but he published (: 236) Solander's brief diagnosis of the plumage characters of *munda*.

1908 : Godman (*Monogr. Petrels* 1 : 136–7) quoted the opinions of Giglioli & Salvadori and Salvin and was unable to determine *munda*.

1912 : Mathews (*Birds Austr.* 2 : 50–70) reviewed the history of the name, wrongly considered *Nectris munda* Kuhl, 1820 to be a *nomen nudum*, and recognized *Nectris munda* Salvin, 1876, "for a bird answering Solander's description", which he published in full for the first time. The name was used by Mathews in the combination *Puffinus assimilis munda* (Salvin, 1876).

1921–1936 : Several authors followed Mathews in the use of the combination *Puffinus assimilis munda* (Salvin, 1876) for small South Pacific shearwaters answering to Solander's description (Mathews and Iredale, 1921, *Man. Birds Austr.* 1 : 23; Murphy, 1927, *Amer. Mus. Novit.* 276 : 4; Oliver, 1930, *N.Z. Birds* : 127).

1933 : Mathews (*Bull. Brit. Orn. Club* 54 (371) : 25) stated that *Proc. munda* Kuhl, 1820, was indeterminate (i.e., he corrected his earlier statement that it was a *nomen nudum*) and that *Nectris munda* Salvin, 1876 was also indeterminate on account of the meagre description given; he therefore proposed *Puffinus kuhliana* *nom. nov.* for the bird described in Solander's manuscript published by Mathews in 1912.

1936 : Murphy (*Oceanic Birds S. America* 2 : 682) stated that *Puffinus assimilis munda* (Salvin) appeared to him to be a synonym of the prior *Puffinus assimilis elegans* Giglioli & Salvadori, and did not mention *Nectris munda* Kuhl.

1943 : Fleming and Serventy (*Emu* 43 : 122–3) indicated that Kuhl's publication of the name *Nectris munda* in 1820, with a brief description was not a *nomen nudum* but qualified as the earliest valid name of the subspecies later named *elegans* and *kuhliana*. They failed to observe that Kuhl's name antedates *Puffinus assimilis* Gould, 1838, and, if accepted, would replace the latter

as the specific name for six or more subspecies distributed in the North and South Atlantic, South Pacific, and south-east Indian oceans.

- 1949: The British Ornithologists' Union List Committee (*Ibis* 91(3) : 512) considered *Nectris munda* Kuhl, 1820; Kuhl's description and the amplified description published by Salvin (1876) were considered inadequate to determine the species, and it was decided that *N. munda* was indeterminable.
- 1952: Fleming and Serventy (*Emu* 52 : 17-23) reiterated their opinion that *Nectris munda* Kuhl, 1820 could be recognised from Kuhl's brief description and locality as a race of the species generally known as *Puffinus assimilis* Gould, 1838, but agreed with other authorities that the best course was to consider the name indeterminable, if this decision could be made irreversible by a Ruling from the International Commission on Zoological Nomenclature.

5. Summary : Since the publication in 1820 of the names *Proc[ellaria]* *munda* Kuhl and *Nectris munda* Kuhl, the species so named has been considered indeterminable by all reviewers with the exception of two of the present applicants (Fleming & Serventy (1943)), who however, have since agreed (1952) that the suppression of the foregoing names is desirable in the interests of stability in nomenclature.

6. For the reasons set forth above we ask the International Commission :—

- (1) to use its Plenary Powers to suppress the under-mentioned specific names for the purposes of the Law of Priority but not for those of the Law of Homonymy :—
- (a) *munda* Kuhl, 1820, as published in the combination *Proc[ellaria]* *munda* ;
 - (b) *munda* Kuhl, 1820, as published in the combination *Nectris munda* ;
- (2) to place the specific names specified in (1) above, as there suppressed under the Plenary Powers, on the *Official Index of Rejected and Invalid Specific Names in Zoology*.

PROPOSED USE OF THE PLENARY POWERS TO VALIDATE THE
GENERIC NAMES "DAIRA" DE HAAN, [1833] (CLASS CRUSTACEA,
ORDER DECAPODA) (A NAME PLACED ON THE "OFFICIAL
LIST OF GENERIC NAMES IN ZOOLOGY" BY THE RULING GIVEN
IN "OPINION" 73) AND "DAIRILIA" DANA, 1853 (CLASS
CRUSTACEA, ORDER AMPHIPODA)

By FRANCIS HEMMING, C.M.G., C.B.E.

(Secretary to the International Commission on Zoological Nomenclature)

(Commission Reference : Z.N.(S.) 911)

The purpose of the present application is to ask the International Commission to rectify an error in the Ruling given in *Opinion* 73 (1922, *Smithson. misc. Coll.* 73 (No.1) : 23-31) when the name *Daira* de Haan, [1833] (*in* von Siebold, *Faun. japon.*, Crust. : 18) (Class Crustacea, Order Decapoda) was placed on the *Official List of Generic Names in Zoology*. The type species of this genus is, by monotypy, *Cancer perlatus* Herbst, [1790] (*Versuch. Naturgesch. Krabben* 1(8) : 265). The error in question came to light in the early part of 1955 when a final check was carried out by this Office of all the entries relating to the names of Decapod Crustacea made on the *Official List of Generic Names in Zoology* during the pre-Lisbon (1935) period for the purpose of formulating such proposals as might be necessary for completing the entries so made in the *Official List* in accordance with the General Directives issued to the Commission by the Thirteenth International Congress of Zoology, Paris, 1948.

2. The error in question arises from the fact that the name *Daira* de Haan, [1833], is invalid by reason of being a junior homonym of *Daira* Milne Edwards (H.), 1830 (*Ann. Sci. nat.*, Paris 20 : 392), a name given to a genus of the Order Amphipoda (Class Crustacea), of which the type species, by monotypy, is *Daira gabertii* Milne Edwards (H.), 1830 (*loc. cit.* 20 : 393).

3. The entry in Neave's *Nomenclator Zoologicus* relating to the name *Daira* Milne Edwards contained a note that this name had later been replaced by the name *Dairilia* Dana, 1853 (*U.S. explor. Exped.* 13(2) : 1595-1596).

4. At this point I consulted Dr. Isobel Gordon (*British Museum (Natural History), London*) as to the action which it was desirable should be taken to deal with the situation which had been disclosed. In reply Dr. Gordon informed me (*in litt.*, 1st November 1955) (1) that fortunately Dana had

replaced the name *Daira* Milne Edwards by the name *Dairilia* in the erroneous belief that it was of later date than the name *Daira* de Haan. Dr. Gordon added that both these invalid names (*Daira* de Haan and *Dairilia* Dana) were in current use and that it was undesirable that either should be disturbed. The advice so received clears the way for the rectification of the error in *Opinion* 73 by the suppression under the Plenary Powers of the name *Daira* Milne Edwards, 1830, thus validating the entry of *Daira* de Haan, [1833], on the *Official List* and incidentally validating also the long-established name *Dairilia* Dana, 1853.

5. Further, I have been informed by Dr. Gordon that the names *Cancer perlatus* Herbst, [1790], and *Daira gabertii* Milne Edwards, 1830, both of which are available names, are currently accepted as the oldest such names for the type species of *Daira* de Haan, [1833], and *Dairilia* Dana, 1853, respectively.

6. There is one Erroneous Subsequent Spelling for *Dairilia* Dana, namely *Dairinia* Bate (C.S.), 1862 (*Cat. Amph. Crust. Brit. Mus.* : 309). In addition, there is one generic name *Daira* which is junior to *Daira* de Haan as well as to *Daira* Milne Edwards. This is *Daira* Gistel, [1847] (*Handb. Naturgesch.* 1850 : 575 ; *id.*, 1848, *Nat. Thierr.* : 174).

7. In the light of the foregoing considerations, I recommend the International Commission :—

- (1) to use its Plenary Powers to correct the error in the Ruling given in *Opinion* 73 by suppressing the generic name *Daira* Milne Edwards (H.), 1830, for the purposes both of the Law of Priority and of the Law of Homonymy ;
- (2) to substitute the following revised entry relating to the generic name *Daira* de Haan, [1833], on the *Official List of Generic Names in Zoology* :—*Daira* de Haan, [1833], as validated under (1) above, (gender : feminine) (type species, by monotypy : *Cancer perlatus* Herbst, [1790]) ;
- (3) to place the under-mentioned generic name on the *Official List of Generic Names in Zoology* :—*Dairilia* Dana, 1853 (gender : feminine) (type species, by monotypy through *Daira* Milne Edwards (H.), 1830, for which the name *Dairilia* Dana is a substitute : *Daira gabertii* Milne Edwards (H.), 1830) ;
- (4) to place the under-mentioned specific names on the *Official List of Specific Names in Zoology* :—
 - (a) *perlatus* Herbst, [1790], as published in the combination *Cancer perlatus* (specific name of type species of *Daira* de Haan, [1833]) ;

- (b) *gabertii* Milne Edwards (H.), 1830, as published in the combination *Daira gabertii* (specific name of type species of *Dairilia* Dana, 1853);
- (5) to place the under-mentioned generic names on the *Official Index of Rejected and Invalid Generic Names in Zoology*:—
- (a) *Daira* Milne Edwards (H.), 1830, as suppressed under the Plenary Powers under (1) above;
- (b) *Daira* Gistel, [1847] (a junior homonym of *Daira* de Haan, [1833]);
- (c) *Dairinia* Bate (C.S.), 1862 (an Erroneous Subsequent Spelling for *Dairilia* Dana, 1853).

OBJECTION TO A. E. ELLIS'S PROPOSAL TO VALIDATE
"BITHYNIA" LEACH, 1818 (CLASS GASTROPODA)

By CAESAR R. BOETTGER

(Zoologisches Institut der Technischen Hochschule, Braunschweig, Germany)

(Commission Reference : Z.N.(S.) 452)

(For the proposal submitted in this case, see *Bull. zool. Nomencl.* 11 : 275-278)

(Letter dated 15th February 1956)

That the generic name *Bulinus* Scopoli, 1777, cannot be considered as a printing error for *Bulinus* Müller, 1781, was established in 1931 (*Opinion* 116). The genus *Bulinus* Scopoli, 1777, has therefore full nomenclatorial status.

When the genus *Bulinus* Scopoli, 1777, was erected, it contained the following species : *Helix putris* L., *Helix fragilis* L., *Helix stagnalis* L. and *Helix tentaculata* L. The establishment of a type species did not follow soon after. It was done in 1927 by Pilsbry and Bequaert who, without any objections, fixed *Helix tentaculata* L. as being the type species of the genus *Bulinus* Scopoli. They were indeed entitled to choose one of the original species of this genus. The fact that since the establishment of *Bulinus* Scopoli (with the exception of *Helix fragilis* L. which is a synonym of *Helix stagnalis* L.) many other species were fixed to be the type species of other genera does not, according to the *Règles*, influence the choice of the type for *Bulinus* Scopoli.

Of course it was rather a nuisance that the genus *Bithynia* Leach, 1818, which was erected in 1818 for *Helix tentaculata* L., should now have become the synonym of *Bulinus* Scopoli, 1777, and that thereby a name which has been generally used should have to be given up. If at that time a proposal for the suppression of *Bulinus* Scopoli had been made, I would undoubtedly have supported it. But now I cannot do this, for in the meantime the name *Bulinus* Scopoli as the genus for *Helix tentaculata* L. has appeared in many important publications on Molluscs, and is also much used in literature on parasitology which deals with those snails which act as carriers of germs which cause illness. It is now nearly thirty years since the determination of *Bulinus* Scopoli by means of the fixing of a type species by Pilsbry and Bequaert, and I consider it a great mistake to suppress this commonly used name. This would not help to clarify matters, but would doubtlessly add to confusion. I regret, therefore, that I cannot support A. E. Ellis's proposal, and I declare myself for the validity of *Bulinus* Scopoli, 1777, and the strict observance of Priority.

**PROPOSED USE OF THE PLENARY POWERS TO SUPPRESS CERTAIN
"NOMINA DUBIA" AND THUS TO VALIDATE THE SPECIFIC NAME
"TUBERCULATUS" AS USED IN THE COMBINATION "ACIDASPIS
TUBERCULATUS" HALL (J.W.) IN 1859 AND, BY SUPPRESSING
THE GENERIC NAME "ACANTHALOMA" CONRAD, 1840, TO
PROVIDE AN ASSURED BASIS FOR THE GENERIC NAME
"LEONASPIS" RICHTER (R.) & RICHTER (E.), 1917 (CLASS
TRILOBITA)**

By **H. B. WHITTINGTON**

(*Museum of Comparative Zoology at Harvard College,
Cambridge, Massachusetts, U.S.A.*)

(Commission Reference : Z.N.(S.) 998)

The object of the present application is to ask the International Commission on Zoological Nomenclature to use its Plenary Powers for the twofold purpose (a) of validating the specific name *tuberculatus* as used in the combination *Acidaspis tuberculatus* by Hall (J.W.) in 1859, and (b) to provide an assured basis for the use of the generic name *Leonaspis* Richter (R.) and Richter (E.), 1917 (Class Trilobita). The circumstances of this case are set out in the following paragraphs.

2. The generic name *Acanthaloma* Conrad, 1840 (: 205) was proposed for a new species of trilobite, the specimen of which consisted of that portion of the exoskeleton called the free cheek. No name was proposed for the species concerned. The description given by Conrad was as follows :—

This is a fragment apparently of the buckler of a most singular species ; it is elongated into a curved spine and has a row of spines along the front, and three spines on the opposite side of the prolongation. Not uncommon in the shaly limestone near Clarksville.

3. In the same paper (1840 : 205) Conrad proposed the new name *Acidaspis tuberculatus* for the cephalon of a trilobite from the same locality, and gave a description. It may be that this cephalon is a part of the same species as that described as *Acanthaloma*, but one cannot be sure, since the whereabouts of neither of Conrad's specimens is known.

4. In discussing fossils from New York State, Conrad (1841 : 31) listed *Acanthaloma*, and on a later page (1841 : 39) *Acidaspis tuberculatus* and *Acanthaloma spinosa* (new name), but without descriptions or reference to his earlier report. It is to be noted that the spelling "*Acanthaloma*" is used, rather than "*Acantholoma*". This variant, as Erroneous Subsequent Spelling possesses no status in nomenclature under the decisions taken by the Copenhagen Congress (1953, *Copenhagen Decisions zool. Nomencl.* : 45, Decision 73).

5. Castelnau (1843 : 23) proposed the name *Acantholoma* [sic] *conradi*, giving a reference to Conrad (1840 : 205) and a French translation of that author's description and mentioning the locality, but giving no figure.

6. R. and E. Richter (1952), in a review of this case, have claimed that Conrad's names of 1840 and 1841 have no validity, and that therefore Castelnau's proposal, though legitimate, has no validity either. It appears however, from a decision taken by the Thirteenth International Congress of Zoology, Paris, 1948 (1950, *Bull. zool. Nomencl.* 4 : 160, 346) that a name published in the way in which Conrad published the name *Acantholoma* is available and that its type species is the first species placed in that genus by a subsequent author.

7. Hall (1859 : 368—370 ; 1861, Pl. 79, figs. 1—14), unaware of Castelnau's work, described *Acidaspis tuberculatus*, and placed in the synonymy of this species *Acidaspis tuberculatus* Conrad, 1840, *Acantholoma* [sic] Conrad, 1840, and *Acantholoma spinosa* Conrad, 1841. The specimens on which Hall based his description are preserved in the New York State Museum, together with additional material, all of which comes from the lower Devonian limestones in or near Clarksville. A re-description of this material is in press (Whittington, 1956).

8. Names published for nominal species without adequate description are a serious danger to stability in nomenclature and this danger is greatly increased when none of the type material is extant. It is very desirable therefore that *nomina dubia* of this kind should be deprived of their power of causing harm by being suppressed by the Commission under its Plenary Powers. In the present case these considerations apply to the following names, all of which may apply—though there can never be any certainty of this—to the species fully described by Hall in 1859 under the name *Acidaspis tuberculatus* :—(1) *tuberculatus* Conrad, 1840, as published in the combination *Acidaspis tuberculatus* ; (2) *spinosa* Conrad, 1841, as published in the combination *Acantholoma spinosa* ; (3) *conradi* Castelnau, 1843, as published in the combination *Acantholoma conradi*. All these names should, I recommend, be suppressed by the Commission under its Plenary Powers. The first should be suppressed for the purposes both of the Law of Priority and of the Law of Homonymy, thus clearing the way for the validation by the Commission of the name *tuberculatus* as used by Hall in 1859 in the combination *Acidaspis tuberculatus*. The second and third of the names recommended for suppression should be suppressed for the purposes of the Law of Priority only, thus preventing any valid subsequent use of these names in the genus concerned.

9. As indicated in paragraph 7 above, Hall did not use Conrad's generic name, and it has not been used subsequently—i.e. for about 100 years—by authors who have treated of this family. In 1917 (*Centralbl. Min. pal. Geol.* 1917 : 465) R. and E. Richter proposed the name *Leonaspis* as the name for a subgenus of *Acidaspis* Murchison. This name has been used subsequently for the species-group to which *A. tuberculatus* Hall, 1859 belongs.

10. In 1949 (: 38, 151) Prantl and Přibyl proposed that the name *Acanthaloma* Conrad, 1840, be brought back into use for a genus of trilobites. R. and E. Richter (1952) claim that this revival would not promote stability in nomenclature, in that it would supersede the name *Leonaspis* that has been in use for 38 years. I am in agreement with this view.

11. Neither the genus *Leonaspis* Richter (R.) & Richter (E.), 1917, nor the genus *Acanthaloma* Conrad, 1840, is generally regarded as the type genus of a taxon of the family-group. The second of this genera has, however, been taken as the base for a subfamily name ACANTHALOMINAE by Prantl & Přibyl (1949, *Rozpr. Stát. Geol. Úst. Československé Rep.* 12 : 18, 35, 133, 151). Since the object of the present application is to secure the suppression of the name *Acanthaloma* Conrad under the Plenary Powers, it follows that similar action is desired in relation to the above family-group name. Since that suppression would follow automatically upon the suppression of the generic name upon which it is based all that is required is that the former name should be placed upon the *Official Index of Rejected and Invalid Family-Group Names in Zoology*. I accordingly ask that this action should be taken by the International Commission.

12. In the light of the foregoing, I ask the International Commission on Zoological Nomenclature :—

(1) to use its Plenary Powers :—

(a) to suppress the under-mentioned names for the purposes of the Law of Priority but not for those of the Law of Homonymy :—

(i) *Acanthaloma* Conrad, 1840 ;

(ii) *spinosa* Conrad, 1841, as published in the combination
Acantholoma spinosa ;

(iii) *conradi* Castelnau, 1843, as published in the combination
Acantholoma conradi ;

(b) to suppress the under-mentioned name for the purposes both of the Law of Priority and of the Law of Homonymy :—*tuberculatus* Conrad, 1840, as published in the combination *Acidaspis tuberculatus* ;

(c) to direct that the binomen *Acidaspis tuberculatus*, as published by Hall (J.W.) in 1859 (*Geol. Survey New York*, Pal. 3 : 368—370) be treated as being a scientific (binominal combination) then published for the first time and to validate the above name as so published ;

(2) to place the under-mentioned generic name on the *Official List of Generic Names in Zoology* :—*Leonaspis* Richter (R.) & Richter (E.), 1917 (gender : feminine) (type species, by original designation : *Odontopleura leonardi* Barrande, 1846) ;

- (3) to place the under-mentioned specific names on the *Official List of Specific Names in Zoology* :—
 - (a) *leonardi* Barrande, 1846, as published in the combination *Acidaspis leonardi* (specific name of type species of *Leonaspis* Richter (R.) & Richter (E.), 1917) ;
 - (b) *tuberculatus* Hall, 1859, as published in the combination *Acidaspis tuberculatus*, as validated under the Plenary Powers under (1)(c) above ;
- (4) to place the under-mentioned generic names on the *Official Index of Rejected and Invalid Generic Names in Zoology* :—
 - (a) *Acanthaloma* Conrad, 1840, as suppressed under the Plenary Powers under (1)(a)(i) above ;
 - (b) The under-mentioned Erroneous Subsequent Spellings for *Acanthaloma* Conrad, 1840 :—
 - (i) *Acantholoma* Conrad, 1841 ;
 - (ii) *Acantholoma* Castelnau, 1843 ;
- (5) to place the under-mentioned specific names on the *Official Index of Rejected and Invalid Specific Names in Zoology* :—
 - (a) The names specified in (1)(a)(i) and (1)(a)(ii) above respectively, as there suppressed under the Plenary Powers ;
 - (b) *tuberculatus* Conrad, 1840, as published in the combination *Acidaspis tuberculatus*, as suppressed under the Plenary Powers under (1)(b) above.
- (6) to place the under-mentioned family group name on the *Official Index of Rejected and Invalid Family-Group Names in Zoology* :—ACANTHALOMINAE Prantl & Pibíryl, 1949 (type genus : *Acanthaloma* Conrad, 1840, a name proposed under (1)(a)(i) above to be suppressed under the Plenary Powers).

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**SUPPORT FOR DR. H. B. WHITTINGTON'S PROPOSAL TO
SUPPRESS THE GENERIC NAMES "ACANTHALOMA"
CONRAD, 1840, AND "ACANTHOLOMA" CONRAD,
1841, AND TO PLACE THE NAME "LEONASPIS"
R. & E. RICHTER, 1917, ON THE
"OFFICIAL LIST"**

By **C. J. STUBBLEFIELD**, D.Sc., F.R.S.
(*Geological Survey & Museum, London*)

(Commission Reference : Z.N.(S.) 998)

For Dr. Whittington's proposal see pp. 22—26 of the present volume)
(Letter dated 28th November 1955)

I gladly support this application since I share the views of H. B. Whittington and R. & E. Richter that the revival of *Acanthaloma* will serve no useful purpose, nor will it promote stability in nomenclature.

**SUPPORT FOR PROFESSOR CHRISTIAN POULSEN'S PROPOSAL
RELATING TO THE GENERIC NAME "PARADOXIDES"
BRONGNIART, 1822 (CLASS TRILOBITA)**

By **GUNNAR HENNINGSMOEN**
(*Paleontologisk Museum, Universitetet i Oslo, Norway*)

(Commission Reference : Z.N.(S.) 623)

(For the proposal submitted see pp. 3—13 of the present volume)
(Extract from a letter dated 13th October 1955)

I would like to inform you that I fully support Dr. Chr. Poulsen's proposal for preserving the name *Olenus*.

**SUPPORT FOR DR. ARKELL'S APPLICATION REGARDING THE
FAMILY-GROUP NAME "SEQUENZICERATIDAE" SPATH, 1924
(CLASS CEPHALOPODA, ORDER AMMONOIDEA)**

By **M. K. HOWARTH**
(*Sedgwick Museum, Cambridge University, Cambridge*)

(Commission Reference : Z.N.(S.) 931)

(For the application submitted see 1955, *Bull. zool. Nomencl.* 11 : 297—298)
(Letter dated 23rd April 1956)

I am writing to support Dr. Arkell's request that the family-group name SEQUENZICERATIDAE should be suppressed under the Plenary Powers. I have previously proposed and defined (1955, *Proc. Yorks. geol. Soc.* 30 : 166) the name ARIETICERATINAE (type genus : *Arieticeras* Seguenza, 1885) for a subfamily of the family HILDOCERATIDAE Hyatt, 1867.

PROPOSED USE OF THE PLENARY POWERS TO PRESERVE THE
ACCUSTOMED USAGE OF THE GENERIC NAMES "THERIDION"
WALCKENAER, 1805 AND "ENOPLOGNATHA" PAVESI, 1880 (CLASS
ARACHNIDA, ORDER ARANEAE)

By HERBERT W. LEVI

(University of Wisconsin, Department of Zoology,
Madison, Wisconsin, U.S.A.)

(Commission Reference : Z.N.(S.) 1008)

The principal purpose of the present application is to ask the International Commission on Zoological Nomenclature to use its Plenary Powers to designate a type species in harmony with accustomed usage for the genus *Theridion* Walckenaer, 1805 (*Tabl. Aran.* : 72) (Class Arachnida, Order Araneae). This genus is the type genus of the family THERIDIIDAE, and this makes it important that there should be no change in the concept represented by the generic name *Theridion*, for any such change would lead to serious confusion, more especially in view of the fact that in the present case (as shown below) the application of the normal provisions of the *Règles* would involve a particularly objectionable transfer of the name *Theridion* to an allied genus now known as *Enoplognatha* Pavesi, 1880. As currently interpreted, *Theridion* Walckenaer is a large genus containing about four hundred described species, many of which are common.

2. Walckenaer did not designate or indicate a type species for his genus *Theridion* but from the originally included species Latreille in 1810 (*Consid. gén. Anim. Crust. Arch. Ins.* : 424, 144) selected a species placed in this genus by Walckenaer as *Theridion redimitum* (i.e. *Araneus redimitus* Clerck, 1757, *Aran. svec.* : 59, Pl. 3, Tab. 9) to be the type species of this genus. The above nominal species is accepted by arachnologists as representing the same taxon as that represented by the nominal species *Araneus ovatus* Clerck, 1757 (*ibid.* : 58, Pl. 3, Tab. 8) and it is by this name that the species concerned is currently known.

3. In 1869 (*Nova Acta Soc. Sci. upsal.* (3) 7(1)(No. 5) : 90) Thorell noticed that *Araneus ovatus* Clerck differed in various respects from the other species then (and now) placed in the genus *Theridion*. Overlooking Latreille's prior selection of this species to be the type species of *Theridion* Walckenaer, he erected a new genus *Phyllonethis*, of which he designated the above species as type species. At the same time he selected *Araneus sisyphius* Clerck, 1757 (*Aran. svec.* : 54) as the type species of *Theridion* Walckenaer.

4. In 1880 Pavesi (P.) established another genus to which he gave the name *Enoplognatha*. This name was published twice in the year 1880. The relevant references are :—(a) *Rend. reale Istituto Lombardo di Scienze e Lettere* (2)13 : 192; (b) *Ann. Mus. civico Stor. nat. Genova* 15 (for 1879—1880) : 325. No type species was designated in the first of these papers but in the second Pavesi selected as the type species, the first of the species cited as belonging to this genus in the earlier paper. The species so selected was *Theridion mandibularis* Lucas, 1840 (*Explor. Algér.*, Zool. 1 : 260, pl. 17, fig. 1). In 1950 (*Paper Alabama Mus. nat. Hist.* No. 30 : 23) Archer, after a study of the male genitalia, pointed out that *Araneus ovatus* Clerck belongs to the genus *Enoplognatha*. The observations that *Araneus ovatus* Clerck (*Theridion ovatum* (Clerck)) has a colulus, that the male has modified chelicerae and that the female has a tooth on the posterior margin of the chelicerae, substantiates the evidence brought forward by Thorell and Archer.

5. Accordingly, the generic name *Enoplognatha* Pavesi, 1880, is a subjective junior synonym of *Theridion* Walckenaer, 1805. The most serious confusion would however result if under the normal provisions of the *Règles* the name *Theridion* were to be transferred to the genus now known as *Enoplognatha* and some new name had to be found for the genus which for one hundred and fifty years has been known by the name *Theridion*. It is to prevent these serious results that the International Commission is now asked to use its Plenary Powers to designate for *Theridion* Walckenaer a type species which will make it possible to continue to use this generic name in its accustomed sense. Of the species included in the genus *Theridion* by Walckenaer in 1805 the one most suitable for designation as the type species of that genus is that which in 1802 (*Faune paris.* 2 : 207) he had described under the name *Aranea picta*. That name is however, invalid, being a junior primary homonym of *Aranea picta* Razoumowsky, 1789 (*Hist. nat. Jorat* : 242). The oldest available name for this species is *Theridion ornatum* Hahn, 1831 (*Mon. Spinnen* (6) : pl. 3, ♂♀). The proposal now submitted is therefore that *Theridion ornatum* Hahn should be designated as the type species of the genus *Theridion* Walckenaer, 1805. At the same time the Commission is asked to preserve the well-known generic name *Enoplognatha* Pavesi, 1880, by using its Plenary Powers to suppress its senior subjective synonym *Phyllonethis* Thorell, 1869, a name which has hardly been used at all.

6. As the present proposal will involve the placing of the foregoing names on the *Official List of Generic Names in Zoology*, it is necessary at this point to note that in 1824 Leach (W.E.) (*Ency. brit. Suppl.* 4th–6th Eds. 1(2) : 438) emended the spelling of the name *Theridion* to *Theridium*, without, however, giving his grounds for so doing. In North America the spelling *Theridium* was used by the majority of authors during the XIXth century, although Hentz, who described many species in the fifties, used *Theridion*. Since 1912 the spelling *Theridion* has been consistently used by all authors both in the United States and in South America. In Germany Wiehle in 1937 used the spelling *Theridium* but in his more recent papers he has used *Theridion*. Tullgrun used

the spelling *Theridium* in comments on Swedish Theridiids in the 1940's. This spelling is also used by Bonnet (1955, *Bibl. Aran.*, vol. 2). The great French arachnologist Simon used *Theridion* seventy years ago. Roewer has always used this spelling and has employed it in his recent *Katalog*. The same spelling has been used also by Berland and by Locket & Millidge in 1953 in vol. 2 of their *British Spiders*. To sum up, the spelling *Theridium* is certainly not in general use, although individual authors have used this spelling in recent years. Under a decision taken by the Fourteenth International Congress of Zoology at Copenhagen, 1953 (1953, *Copenhagen Decisions zool. Nomencl.* : 43, Decision 71) the spelling *Theridion* is, it should be noted, a Valid Original Spelling and is therefore not subject to emendation.

7. The genus *Theridion* Walckenaer is, as has already been noted (paragraph 1 above), the type genus of the family THERIDIIDAE. According to Kaston (B.J.) in his "Family Names of the Order Araneae" (1938, *Amer. Midland Nat.* 19(3) : 645) the genus *Theridion* Walckenaer was first made the base of a family-group name by Sundevall (J.C.) in 1833 (*Conspectus Arachnidum* : 15). The form in which Sundevall published this name was THERIDIIDES.

8. The following are the recommendations which for the reasons set forth above are now submitted for the consideration of the International Commission on Zoological Nomenclature, namely that it should :—

- (1) use its Plenary Powers (a) to set aside all selections of type species for the genus *Theridion* Walckenaer, 1805, made prior to the Ruling now asked for, (b), having done so, to designate *Theridion ornatum* Hahn, 1831, to be the type species of the foregoing genus, and (c) to suppress the generic name *Phyllonethis* Thorell, 1869, for the purposes of the Law of Priority but not for those of the Law of Homonymy ;
- (2) to place the under-mentioned generic names on the *Official List of Generic Names in Zoology* :—
 - (a) *Theridion* Walckenaer, 1805 (gender : neuter) (type species, by designation under the Plenary Powers under (1)(b) above : *Theridion ornatum* Hahn, 1831) ;
 - (b) *Enoplognatha* Pavesi (P.), 1880 (gender : feminine) (type species, by designation by Pavesi (1880) : *Theridion mandibularis* Lucas, 1840) ;
- (3) place the under-mentioned specific names on the *Official List of Specific Names in Zoology* :—
 - (a) *ornatum* Hahn, 1831, as published in the combination *Theridion ornatum* (specific name of type species of *Theridion* Walckenaer, 1805) ;

- (b) *mandibularis* Lucas, 1840, as published in the combination *Theridion mandibularis* (specific name of type species of *Enoplognatha* Pavesi, 1880);
 - (c) *ovatus* Clerck, 1757, as published in the combination *Araneus ovatus*;
 - (d) *sisyphius* Clerck, 1757, as published in the combination *Araneus sisyphius*;
- (4) place the under-mentioned generic names on the *Official Index of Rejected and Invalid Generic Names in Zoology* :—
- (a) *Phyllonethis* Thorell, 1869, as suppressed under the Plenary Powers under (1)(c) above;
 - (b) *Theridium* Leach (W.E.), 1824 (an Invalid Emendation of *Theridion* Walckenaer, 1805);
- (5) place the under-mentioned specific name on the *Official Index of Rejected and Invalid Specific Names in Zoology* :—*picta* Walckenaer, 1802, as published in the combination *Aranea picta* (a junior primary homonym of *picta* Razoumowsky, 1789, as published in the foregoing combination);
- (6) place the under-mentioned family-group name on the *Official List of Family-Group Names in Zoology* :—THERIDIIDAE (correction of THERIDIIDES) Sundevall, 1833 (type genus: *Theridion* Walckenaer, 1805);
- (7) place the under-mentioned family-group name on the *Official Index of Rejected and Invalid Family-Group Names in Zoology* :—THERIDIIDES Sundevall, 1833 (type genus: *Theridion* Walckenaer, 1805) (an Invalid Original Spelling for THERIDIIDAE).

PROPOSED USE OF THE PLENARY POWERS TO DESIGNATE A TYPE SPECIES IN HARMONY WITH ACCUSTOMED USAGE FOR THE GENUS "PROTOPELTURA" BRÖGGER, 1882 (CLASS TRILOBITA), A GENUS BASED UPON A MISIDENTIFIED TYPE SPECIES

By GUNNAR HENNINGSMOEN

(Paleontologisk Museum, Universitetet i Oslo, Norway)

(Commission Reference : Z.N.(S.) 1034)

The object of the present application is to ask the International Commission on Zoological Nomenclature to use its Plenary Powers to designate a type species in harmony with accustomed usage for the genus *Protopeltura* Brögger, 1882 (Class Trilobita) in order to avoid the confusion which would result from the application of the normal provisions of the *Règles*. *Protopeltura* Brögger is a genus based upon a misidentified type species and the Commission is asked to deal with this name under the special procedure prescribed for cases of this kind by the Thirteenth International Congress of Zoology, Paris, 1948 (1950, *Bull. zool. Nomencl.* 4 : 158—159), as modified in certain minor respects by the Fourteenth International Congress of Zoology, Copenhagen, 1953 (1953, *Copenhagen Decisions zool. Nomencl.* : 68, Decision 128). The facts of the present case are set out briefly below.

2. *Protopeltura* was erected by Brögger in 1882 (: 105) as a subgenus of *Peltoura* Milne Edwards, 1840. This subgenus was based by Brögger on Norwegian material which he misidentified with the nominal species *Olenus* ? *acanthurus* Angelin, 1854 (: 44). This was the only nominal species cited by Brögger as belonging to *Protopeltura*.

3. Moberg & Möller (1898 : 265) were the first to point out that Brögger's material did not belong to the *Olenus* ? *acanthurus* of Angelin and that Angelin's species was referable to the genus *Parabolina* Salter, 1849.

4. In 1909 (: 48) Westergaard gave the name *Peltura praecursor* to the species which Brögger had misidentified as *Olenus* ? *acanthurus* Angelin. At this time Westergaard considered *Protopeltura* Brögger to be a synonym of *Peltoura* Milne Edwards. Later (1922 : 168) Westergaard accepted *Protopeltura* as a distinct genus with *Peltura praecursor* Westergaard as type species. This arrangement has been accepted by later workers and is now the general practice. At the present time several other species are regarded as belonging to *Protopeltura* Brögger.

5. In order to avoid the unnecessary and pointless name-changing which would result if the normal provisions of the *Règles* were to be applied in the present case and if in consequence it were necessary to sink the name *Protopeltura* Brögger, 1882, as a junior subjective synonym of *Parabolina* Salter, 1849, I now ask the International Commission on Zoological Nomenclature :—

- (1) under the procedure prescribed by the Thirteenth International Congress of Zoology, Paris, 1948, for determining the type species of a genus based upon a misidentified type species, (a) to use its Plenary Powers to set aside all designations, indications or selections of a type species of *Protopeltura* Brögger, 1882, made prior to the Ruling now asked for, and (b), having done so, to designate *Peltura praecursor* Westergaard, 1909, to be the type species of the above genus ;
- (2) to place the under-mentioned generic name on the *Official List of Generic Names in Zoology* :—*Protopeltura* Brögger, 1882 (gender : feminine) (type species, by designation under the Plenary Powers under (1)(b) above : *Peltura praecursor* Westergaard, 1909) ;
- (3) to place the under-mentioned specific names on the *Official List of Specific Names in Zoology* :—
 - (a) *acanthurus* Angelin, 1854, as published in the combination *Olenus ? acanthurus* ;
 - (b) *praecursor* Westergaard, 1909, as published in the combination *Peltura praecursor* (specific name of *Protopeltura* Brögger, 1882, by designation under the Plenary Powers as proposed in (1) above).

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THE BULLETIN OF ZOOLOGICAL NOMENCLATURE

The Official Organ of
THE INTERNATIONAL COMMISSION ON
ZOOLOGICAL NOMENCLATURE

Edited by
FRANCIS HEMMING, C.M.G., C.B.E.
Secretary to the International Commission on Zoological Nomenclature

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BULLETIN OF ZOOLOGICAL NOMENCLATURE

Volume 12. Part 2 (pp. 33—64)

12th June 1956

NOTICES PRESCRIBED BY THE INTERNATIONAL CONGRESS OF ZOOLOGY

The following notices are given in pursuance of decisions taken, on the recommendation of the International Commission on Zoological Nomenclature (see 1950, *Bull. zool. Nomencl.* 4 : 51—56, 57—59), by the Thirteenth International Congress of Zoology, Paris, July 1948 (see 1950, *Bull. zool. Nomencl.* 5 : 5—13, 131).

(a) Date of commencement by the International Commission on Zoological Nomenclature of voting on applications published in the "Bulletin of Zoological Nomenclature"

NOTICE is hereby given that normally the International Commission will start to vote upon applications published in the *Bulletin of Zoological Nomenclature* on the expiry of a period of six calendar months from the date of publication in the *Bulletin* of the applications in question. Any specialist who may desire to comment upon any of the applications published in the present Part (Vol. 12, Part 2) of the *Bulletin* is accordingly invited to do so in writing to the Secretary to the Commission, as quickly as possible and in any case, in sufficient time to enable the communication in question to reach the Secretariat of the Commission before the expiry of the six-month period referred to above.

(b) Notice of the possible use by the International Commission on Zoological Nomenclature of its Plenary Powers in certain cases

NOTICE is hereby given that the possible use by the International Commission on Zoological Nomenclature of its Plenary Powers is involved in applications published in the present Part of the *Bulletin of Zoological Nomenclature* in relation to the under-mentioned names :—

- (1) *punctata* (*Querquedula*), validation of, as from Selater, 1880, as the name for the Hottentot Teal (Class Aves) (Z.N.(S.) 794) ;
- (2) *Trinucleus* Murchison, 1839, validation of ; *tuberculatus* Link, 1807 (*Trinucleus*), suppression of (Class Trilobita) (Z.N.(S.) 926 ;

Notices prescribed by the International Congress of Zoology (*continued*)

- (3) *Panulirus* White, 1847, validation of ; *commune* Leach, 1818 (*Phyllosoma*) and *rissonii* Desmarest, 1825 (*Palinurus*), suppression of (Class Crustacea, Order Decapoda) (Z.N.(S.) 1030) ;
- (4) *Iliaenus* Dalman, [1827], protection of by suppression of *Cryptonymus* Eichwald, 1825 (Class Trilobita) (Z.N.(S.) 1068).

2. Comments received in sufficient time will be published in the *Bulletin* : other comments, provided that they are received within the prescribed period of six calendar months from the date of publication of the present Part will be laid before the International Commission on Zoological Nomenclature at the time of commencement of voting on the application concerned.

3. In accordance with the procedure agreed upon at the Session held by the International Commission on Zoological Nomenclature in Paris in 1948 (see 1950, *Bull. zool. Nomencl.* 4 : 56), corresponding Notices have been sent to the serial publications *Nature* and *Science*.

FRANCIS HEMMING

*Secretary to the International Commission on
Zoological Nomenclature*

28 Park Village East, Regent's Park,
LONDON, N.W.1, England.

12th June 1956.

**PROPOSED USE OF THE PLENARY POWERS TO VALIDATE
THE SPECIFIC NAME "PUNCTATA" AS THE NAME FOR THE
HOTTENTOT TEAL (CLASS AVES)**

By **W. D. L. RIDE**, B.A., and **A. J. CAIN**, M.A., D.Phil.

(Department of Zoology and Comparative Anatomy, University Museum, Oxford)

RICHARD MEINERTZHAGEN, D.S.O.

(London)

FRANCIS HEMMING, C.M.G., C.B.E.

(Secretary to the International Commission on Zoological Nomenclature)

and

DIANA N. NOAKES, B.Sc. (Lond.)

(Research Assistant, International Commission on Zoological Nomenclature)

(Commission Reference : Z.N.(S.) 794)

The purpose of the present application is to ask the International Commission on Zoological Nomenclature to use its Plenary Powers to preserve the specific name *punctata* as the specific name for the Hottentot Teal. This species is invariably known by the name *Anas punctata* Burchell, 1822 (*Trav. S. Afr.* 1 : 283) but, as has now been discovered, that name applies not to this species but to the Stiff-tailed Duck which in turn is invariably known by the name *Erismatura maccoa* Eyton, 1838 (*Mon. Anatidae* : 169). The most serious confusion would result if under the normal operation of the *Règles* it were necessary to transfer the name *punctata* Burchell to the Stiff-tailed Duck and to find some other name for the Hottentot Teal. The circumstances of this case are set out in the following paragraphs.

2. Two of the present applicants (W.D.L.R. & A.J.C.) and Mr. J. Hull of the Oxford University Museum have for some time been preparing a full list of the Burchell collections in the Museum. A complete list of the names given by Burchell in his *Travels in the Interior of South Africa*, 1822, has been prepared and, as Burchell's ornithological collections are known to be in Oxford (Sherborn, 1940 ; Poulton, 1904a, 1907) an attempt has been made to identify all the Burchell material in the collection and, in particular, all his type material. This has led to the discovery that the only specimen of *Erismatura maccoa* Eyton (O.U.M. Ref. No. B/1920) in the collection has, tied to its leg, a paper label with the following legend : " B31. *Anas punctata*. B Burch. Travels in South Africa 1 : 283 ". There is also a small label attached to the leg of this specimen with " 31 " on it. There is no specimen of the Hottentot Teal in the collection. Through the courtesy of the Hope Professor of Zoology, Ride

and Cain have had access to a considerable number of Burchell's manuscripts and are satisfied that the label quoted above on the specimen of the Stiff-tailed Duck is in Burchell's handwriting.

3. One of us (W.D.L.R.) has personally unwrapped several specimens of Burchell's which had remained sealed and unopened up to the time that the present investigation was started. This has shown that it was Burchell's practice to affix a small number tag (in the present case, "31") to each specimen and then to wrap that specimen in coarse wrapping paper which was generally sealed with wax. This wrapper was then inscribed with the nature of the contents and the specimen number (in the present case, "B31. *Anas punctata*. B"). The large label inscribed "*Anas punctata*. B" which is tied to the leg of the specimen of the Stiff-tailed Duck is of the same paper as these wrappers and there is a small piece of sealing wax of the same colour adhering to its surface. That the wrapper relates to the specimen to which it is at present attached is indicated by the identical Burchell number on both specimen tag and wrapper. Unfortunately, as previously noted by Poulton (1904b) the notebooks relating to these numbers cannot be traced.

4. In his discussion of this species (: 283) Burchell wrote: "Here . . . I met with . . . the Crimson-billed Duck . . . and a small brown duck . . . which, according to Speelman, is called by the colonists *Smi-eendje* (Widgeon). This last is, probably, not a common bird, as I never saw it but this once". The "brown duck" referred to above was described by Burchell as follows in a footnote on the same page:—

"*Anas punctata*. B. Entirely brown, excepting the chin, the cheeks, and a stripe from the eye, which are white. The eyes, bill, legs, and toes, black: the back sprinkled with minute yellow dots; the under part of the body indistinctly marked with darker spots: the tail short and brown, with the tips of the feathers acute."

5. The particulars given in paragraphs 2 and 3 above establish beyond question that the specimen of the Stiff-tailed Duck bearing the Burchell number 31 and the Oxford University Museum number B/1920 is at least one of the syntypes of Burchell's *Anas punctata*. Further, in view of the fact that there do not appear to be any Burchell specimens of birds outside the Oxford Museum, it is likely that this was the only specimen obtained by Burchell. It is possible therefore that the specimen referred to above, which agrees closely with Burchell's description of his *Anas punctata*, is the only specimen which he obtained and accordingly that it is actually the holotype specimen of that species not by description but by monotypy.

6. For the reasons explained in the opening paragraph of the present application we are of the opinion that means must be found for preventing the confusion which would follow the transfer of the specific name *punctata* Burchell from the Hottentot Teal to the Stiff-tailed Duck. We have considered therefore the question of how this can be avoided. In view of the

investigations described above, it would clearly not be possible to ask the Commission to use its Plenary Powers to direct that the name *punctata* Burchell shall apply to the Hottentot Teal, for this would run directly counter to Burchell's description and specimen. Moreover, there is now no evidence that Burchell ever took the Hottentot Teal during his travels. The first step therefore must be for the Commission to suppress the name *punctata* Burchell, 1822, for nomenclatorial purposes, thus clearing the way for the validation under its Plenary Powers of the name *punctata* as applied to the Hottentot Teal by some author subsequent to Burchell.

7. We have accordingly examined the literature for the purpose of selecting the most suitable early reference to the Hottentot Teal under the name *punctata*. This search has not been altogether easy, since for the most part the authors concerned gave no description or indication clearly attaching the name *punctata* as used by them to the Hottentot Teal, while the reference given by them to *punctata* Burchell has the effect of attaching the name as used by those authors to the Stiff-tailed Duck and not to the Hottentot Teal. Gray (G.R.), (1845) (*Gen. Birds*, 3 : [616], no. 21) for example appears to have considered that the name *punctata* Burchell applied to the Hottentot Teal, for later in the same volume (: 627) he listed the Stiff-tailed Duck under the name *Erismatura maccoa*. It must be noted, however, that Gray does not appear to have had very clear ideas about the identity of these birds, for on the same page as that on which he listed *Anas punctata* he listed also as a separate species what he called "*Q[uerquedula] hottentotta* [sic] A. Smith, Eyton's Anat. p. 129. Ill. Zool. S. Afr. Birds", a name which also applies to the Hottentot Teal. Even if it were quite clear that Gray intended to refer to the Hottentot Teal when he used the name *punctata*, his use of that name would not provide a valid basis for the application of the name *punctata* to the above species, for Gray gave no description and the only indication which he provided was a reference to Burchell, 1822, which automatically attaches Gray's usage of this name to the Stiff-tailed Duck.

8. The next author who has to be considered is Newton who in a paper published in 1871 (*Proc. zool. Soc. Lond.* 1871 : 649 footnote) discussed as follows the question of the name for the Hottentot Teal, in which he was interested from the point of view of the name for an Australian duck : " Unless it can be shown that Cuvier's name [*punctata*] was published before Burchell's (and this is extremely unlikely), *punctata* must of course be kept for the South-African bird, with which (as Mr. Gray has suggested to me) Sir Andrew Smith's subsequently designated *Querquedula hottentotta* [sic] (Zool. S. Afr. *Aves*, pl. 105) seems to be identical . . . ". This passage shows that Newton was of the opinion that *punctata* Burchell and *hottentotta* [sic] Smith probably applied to the same species, namely the Hottentot Teal, but the conditional manner in which he expressed this opinion makes his paper unsuitable for selection as the place as from which the name *punctata* shall rank as the name for the above species.

9. We come now to the paper by Selater (P.L.) entitled "List of . . . Species of Anatidae . . ." published in 1880 (*Proc. zool. Soc. Lond.* 1880 : 496-536). In this paper (: 522) Selater applied the name *Querquedula punctata* to the Hottentot Teal, unequivocally citing "*Q. hottentotta* [sic] Smith, Ill. S. Afr. Zool. Aves t 105" as a synonym of *punctata* which he naturally attributed to Burchell. Selater's usage of the name *punctata* is eminently suitable for selection as that from which the name *punctata* should rank as the name for the Hottentot Teal, for its acceptance as such would provide a figure (Smith's plate 105) as that of the holotype of the nominal species *Querquedula punctata* Selater, 1880, which would then represent the Hottentot Teal, the name *punctata* Selater, 1880, having thus become a validly published name for this species. As the next step, we therefore recommend that, acting under its Plenary Powers, the Commission should (1) direct that the binomen *Querquedula punctata* Selater, 1880, be treated as being a scientific name (binominal combination) then published for the first time, (2) validate the above name so published, and (3) direct that the specific name *punctata* Selater, 1880, as published in the combination *Querquedula punctata* and validated as recommended in (2) above, be applied to the species figured by Smith (A.) in [1845] as *Querquedula hottentotta* on the plate cited by Selater, namely plate 105 in the Aves Section of the work entitled *Illustrations of the Zoology of South Africa*, the specimen so figured to be the holotype of *Querquedula punctata* Selater, 1880. We further recommend (a) that the name *punctata* Selater, 1880, validated for the Hottentot Teal in the manner recommended above should be placed on the *Official List of Specific Names in Zoology* and (b) that at the same time the name *maccoa* Eyton, 1838, as published in the combination *Erismatura maccoa*, the oldest available name for the Stiff-tailed Duck, be placed on the same *Official List*.

10. The action recommended in the preceding paragraph will secure that the name *punctata* Selater, 1880, is a name validly given to the Hottentot Teal, but, unless supplemented in certain directions, it will not itself suffice to ensure that the above name is the oldest available name for that species. First, it will be necessary for the Commission to suppress certain names which are subjectively interpreted as applying to the Hottentot Teal and which were published before 1880, since, if not so suppressed the names in question would be senior subjective synonyms of *punctata* Selater. Second, it will be necessary for the Commission to suppress two names, each consisting of the word *punctata* and each published in combination with the generic name *Anas*, which apply to species of duck other than the Hottentot Teal and which, if not suppressed by the Commission, would invalidate the name *punctata* Selater, of which each would become a senior primary homonym. These names are at present invalid as junior primary homonyms of *punctata* Burchell, 1822, as published in the combination *Anas punctata*, and need now to be taken into account only because it is an essential part of the present proposal that the above name should be suppressed for the purposes not only of the Law of Priority but also of the Law of Homonymy. Third, it will be necessary for the Commission

to suppress certain usages in the period 1822—1880 of the name *punctata* in combination with the generic names *Anas*, *Mareca* and *Nettion* which in their turn would become available as names when, as is now proposed, all new names consisting of the word "punctata" published in the foregoing genera in the above period were suppressed by the Commission, unless these usages also were similarly suppressed. These and certain other subsidiary problems are discussed in the following paragraphs.

11. Four names were published for the Hottentot Teal between 1822, the year in which it has hitherto always, though incorrectly been supposed that this species was named *Anas punctata* by Burchell and 1880, the year in which that name was first clearly applied to that species by Selater, whose usage it is now desired to validate. One of these is itself invalid as a junior homonym of another name and is discussed separately below. The three other names are all available names and are thus senior subjective synonyms of *punctata* Selater, 1880. These names which must therefore now be suppressed under the Plenary Powers for the purposes of the Law of Priority, though not for those of the Law of Homonymy are the following :—

(a) *Querquedula hottentota* Eyton, 1838, *Mon. Anatidae* : 129

(b) *Anas pileata* Lichtenstein (M.H.C.), 1842, *Verz. Samml. Säugeth. Vög. Kaffern.* : 20, nos. 244, 245

(c) *Querquedula madagascariensis* Grandidier, 1867, *Rev. Mag. Zool.* (2) 19 : 87, 255

12. A word of explanation regarding the history and orthography of the name *hottentota* is required. This name was first published as *Querquedula hottentota* Smith (A.), 1837 (*Cat. S. Afr. Mus.* : 37). As so published, this was a *nomen nudum* which appeared in a list of birds belonging to the South African Museum at that time on exhibition in London. The next publication of this name was in 1838 when it was published as *Querquedula hottentota* by Eyton (*Mon. Anatidae* : 129). Eyton provided a description of this species and the name *hottentota* ranks for priority from his book. In [1845] (*Ill. Zool. S. Afr.*, Aves : pl. 105) Smith figured this species under the name *Querquedula hottentota*, attributing this name to himself but without stating that it was new. In the period 1844–1849 there appeared the third volume of Gray's *Genera of Birds*, in which, on a sheet dated 1845, Gray attributed the name to Smith and misspelt it as *hottentotta*, a misspelling which was copied by many later authors including Sherborn (*Index Anim.*, Pars secund. : 3048), one of the very few mistakes made by that learned author. These invalid names will need to be placed on the *Official Index of Rejected and Invalid Specific Names in Zoology*. So also will the name *maccoa* Smith, 1837 (*Cat. S. Afr. Mus.* : 37), as published in the combination *Oxyura maccoa*, which would have been the oldest available name for the Stiff-tailed Duck, if it had not been published as a *nomen nudum*.

13. The fourth of the names given to the Hottentot Teal in the period 1822—1880 was *Anas assimilis* Hartlaub, 1877 (*Vög. Madagasc.* : 365). This name is invalid as a junior homonym of *Anas assimilis* Forster, 1844 (*Descr. Anim.* : 46). The name *assimilis* Forster, though an available name, is not currently in use, being considered to be a junior subjective synonym of *Anas capensis* Gmelin (J.F.) [1789] (*Syst. Nat.* (ed. 13) 1(2) : 527), the South African Cape Wigeon. There is also another senior homonym of *Anas assimilis* Hartlaub, 1877, namely *Anas assimilis* Schlegel, 1866 (*Mus. Pays-Bas* 6 (Anseres) : 59), a name which is currently regarded as applying to the same species as the name *Querquedula bernieri* Hartlaub, 1860 (*J. Orn.*, Lpz 8 : 173). The objectively invalid names *assimilis* Schlegel, 1866, and *assimilis* Hartlaub, 1877, should now be placed upon the *Official Index of Rejected and Invalid Specific Names in Zoology*, while the names *capensis* Gmelin, [1789], and *bernieri* Hartlaub, 1860, should be placed on the *Official List of Specific Names in Zoology*.

14. The first name consisting of the word *punctata* applied to a species of duck prior to 1880 which it is necessary to consider is *Anas punctata* Lesson, 1831 (*Traité d'Orn.* : 634). This name was derived from a manuscript label of Cuvier's on a male specimen in the Paris Museum and is the oldest name for the Australian duck named *Mareca castanea* by Eyton in 1838 (*Mon. Anatidae* : 119, pl. 22) and would become the valid name for that species on the suppression of *Anas punctata* Burchell, 1822, under the Plenary Powers, unless it in turn were suppressed by the Commission under those Powers. Moreover, if permitted to retain the status of availability, the name *punctata* Lesson, 1831, would be a senior homonym of, and would thus invalidate, the name *punctata* Selater, 1880, the name which it is desired should become the oldest available name for the Hottentot Teal. In these circumstances it will be necessary for the Commission to suppress the name *punctata* Lesson, 1831, for the purposes both of the Law of Priority and of the Law of Homonymy. So suppressed, the name *punctata* Lesson should be placed on the *Official Index* and the name *castanea* Eyton, 1838 on the *Official List*.

15. The second name to be considered is *Anas punctata* Reichenbach, [1845] (*Syn. Avium* (Natatores) : pl. 85, figs. 915, 916). This name (like *Anas punctata* Lesson, 1831) is at present a junior homonym of *Anas punctata* Burchell, 1822. If the latter name were now to be suppressed under the Plenary Powers and if (as proposed in paragraph 14 above) the name *punctata* Lesson, 1831, were similarly to be so suppressed for all purposes, the name *punctata* Reichenbach, 1845, would become an available name but it would not come into use, for it is considered that it applies to the same species as *Anas erythrorhyncha* Gmelin (J.F.), [1789] (*Syst. Nat.* (ed. 13) 1(2) : 517). While from the point of view of the Law of Priority the name *punctata* is innocuous, it is essential that it should be suppressed under the Plenary Powers since it is a senior homonym of, and would invalidate, the name *punctata* Selater, 1880, which it is desired should become the oldest available name for the Hottentot Teal. Accordingly, as part of the arrangements proposed in the present application it will be necessary

for the name *punctata* Reichenbach, [1845], to be suppressed for the purposes both of the Law of Priority and of the Law of Homonymy. When so suppressed, this name will need to be placed on the *Official Index*, the name *erythrorhyncha* Gmelin, [1789], being at the same time placed on the *Official List*.

16. The third species in which the name *punctata* appears in synonymy noted by Salvadori (1895, *Cat. Birds Brit. Mus.* 27 : 254) is *Anas (Mareca) gibberifrons* Müller (S.), 1842 (*Verh. nat. Ges. Ned. overz. besitt., Land- en Volkenk.* : 159), but these all appear to be later uses (or misuses) of the name *punctata* as published by earlier authors, none of them being new names from the standpoint of the authors by whom they were published. The first of these uses by Gray (G.R.) who in 1859 (*Proc. zool. Soc. Lond.* 1859 : 166) in a list of species entered what he called "*Anas punctata* var.", for which he gave no description, merely citing "*Anas punctata*, Gould" without a bibliographical reference and stating that the species concerned had been obtained in New Caledonia. The Gould reference is presumably to Gould, 1845 (*Birds of Australia* 7 : pl. 11) but Gould did not publish the name *punctata* as a new name of his own but took the name from Cuvier MS., i.e. from Lesson, 1831. This presumption is confirmed by the fact that Gould cited for his *punctata* a reference to *castanea* Eyton, the valid name for the Australian species called *punctata* by Lesson. In 1865 (*Handb. Birds Australia* 2 : 365, 366) Gould again used the name *Anas punctata*, applying it in such a way as to include not only his own *punctata* of 1845 [i.e. *castanea* Eyton] but also the species now known as *gibberifrons* Müller. Finally, in [1866] (*Proc. zool. Soc. Lond.* 1865 : 861) Slater (P.L.) used the manuscript name *A. punctata* Cuvier, to denote a specimen of the "Chestnut-Breasted Duck" (?=*Mareca castanea* Eyton, 1838) in a list of additions to the Zoological Society's Menagerie. In doing this, Slater merely followed Lesson (1831) and Gould (1845). The name *punctata* so used by Slater was not a new name. From the point of view of the species now known as *gibberifrons* none of the above usages are of importance. From the point of view of the proposal that the Commission should use its Plenary Powers to make *punctata* Slater, 1880, the oldest and therefore valid name for the Hottentot Teal, these usages are of significance since if, as is now proposed, the names *punctata* Burchell, 1822 (paragraph 10), *punctata* Lesson, 1831 (paragraph 14) and *punctata* Reichenbach, [1845] (paragraph 15) are to be suppressed by the Commission under its Plenary Powers for the purposes of the Law of Homonymy as well as for those of the Law of Priority some of the usages of the name *Anas punctata* for this species prior to 1880 (e.g. usages by Gould, [1886], Newton, 1871) would invalidate *punctata* Slater, 1880, under the Law of Homonymy. It will be necessary therefore for the Commission when dealing with the present case not only to suppress all new names consisting of the word *punctata* published in the combination *Anas punctata* before 1880 but also to include a provision invalidating all other usages of the name *punctata* in combination with the generic name *Anas* published in the same period. At the same time the name *gibberifrons* Müller (S.), 1842, should be placed on the *Official List of Specific Names in Zoology*.

17. The fourth species, the synonymy of which has to be examined is the species now known by the specific name *guttata* Schlegel, 1866 (*Dendrocygna guttata* Schlegel, 1866, *Mus. Pays-Bas* 6 (Anseres) : 85). The name *punctata* appears to have been applied to this on one occasion only. This was by Finsch, 1865 (*Neu-Guin.* : 183). Reference to Finsch's work shows that, as used by him, the name *Anas punctata* is an absolute *nomen nudum*, the name appearing only in a table showing the distribution of species, in which no description was given and no bibliographical references were cited. Any worker not having access to the book cited above might think from the way in which this name has been cited by later authors (e.g. by Salvadori, 1895 : 164) that this was a validly published name and therefore a name which would invalidate as a homonym the later name *Anas punctata* Scater, which it is proposed that the Commission should validate for the Hottentot Teal. In order to obviate this risk it is desirable that this name should now be placed on the *Official Index of Rejected and Invalid Specific Names*. At the same time the name *guttata* Schlegel, 1866, should be placed on the *Official List of valid names*. In this connection however it must be noted that there are two names which are older than *Dendrocygna guttata* Schlegel, 1866, both of which however are found on inspection of the works concerned to be no more than *nomina nuda*. The names concerned are :—(a) *Dendrocygna guttulata* Wallace, 1863, *Proc. zool. Soc. Lond.* 1863 : 36 ; (b) *Dendrocygna guttulata* Scater (P.L.), 1864, *Proc. zool. Soc. Lond.* 1864 : 300. For reasons similar to those explained above in connection with the name *punctata* Finsch, 1865, these two names ought now to be interred by being placed on the *Official Index of Rejected and Invalid Specific Names*.

18. The fifth and last species, the synonymy of which has to be examined is the species now known by the specific name *albobularis* Hume, 1873 (*Mareca albobularis* Hume, 1873, *Stray Feathers* 1 : 303). In the synonymy given for this species by Salvadori (1895 : 257) three usages of the specific name *punctata* are given. All three of these have been examined by the present applicants. The first is to a paper by Ball published in 1872 (*J. asiat. Soc. Bengal* 41 (Part 2) : 290) in which what Ball called "*Mareca punctata*" was doubtfully attributed to Cuvier. Under this name Ball gave a reference to Gould's pl. 11 in volume 7 of the *Birds of Australia* to which Gould had applied the name *Anas punctata* but which (as explained in paragraph 16 above), actually represents the Australian duck, the oldest valid name for which is *Mareca castanea* Eyton, 1838. Whether or not Salvadori was correct in considering that in this paper Ball intended to refer to *Mareca albobularis* Hume when he used the name *Mareca punctata*, it is clear that the name *punctata* was not a new name from Ball's point of view. The minor observations which he made would not have been sufficient to constitute an "indication" for this name even if he had intended to bring it forward as a new name. In the following year however (1873, *Stray Feathers* 1 : 88) Ball again dealt with his "*Mareca punctata* Cuvier", citing a reference to his earlier paper, mentioning Tytler's manuscript name *andamanensis* (a name which is discussed in paragraph 19 below). In this paper Ball gave a detailed description of specimens from the Andaman Islands

which appears to apply to Hume's species *albogularis*. This would be amply sufficient to provide an "indication" for this name and therefore to render it an available name if all earlier uses of the specific name *punctata* as applied to species of ducks prior to 1880 were to be suppressed by the Commission in the manner recommended in the present application. In these circumstances the name *Mareca punctata* Ball, 1873, would be a senior secondary homonym of *Anas punctata* Sclater, 1880, the name which it is desired should now be made the oldest available name for the Hottentot Teal, for that species and Hume's species *albogularis* (with which *punctata* Ball, 1873, is subjectively identified) have commonly been treated as both belonging to the genus *Anas*. It will therefore be necessary as part of the plan now submitted that the specific name *punctata* Ball, 1873, as published in the combination *Mareca punctata* be rendered unavailable for nomenclatorial purposes. The third usage of the name *punctata* in combination with the generic name *Anas* cited by Salvadori under *albogularis* Hume is that by Blyth in 1875 in his "Catalogue of Mammals and Birds of Burma" (*J. asiat. Soc. Bengal* 44 (Pt. 2), Extra Number : 166). All that Blyth did in this passage was to indicate that this species did not occur in Burma but did occur in the Andaman Islands. Blyth's paper was edited by Viscount Walden (: xvii) who, though giving no description of Blyth's bird, added references to two earlier names or usages of names. The first of these was to Gould (7 : pl. 11) which, as already noted, represents *Mareca castanea* Eyton, 1838; the second was to *andamanensis* Tytler, 1867, which was a manuscript name which had originally been published as a *nomen dubium* but which, as shown in paragraph 19 below, had in 1873 been published with an ample "indication" by Hall by whom it was applied to the species now known by the specific name *albogularis* Hume. Thus, the name *Anas punctata* Blyth, 1875, is a mere list name possessing no status in zoological nomenclature.

19. Before leaving the subject of the synonymy of the species now known by the specific name *albogularis* Hume, 1873, it is necessary to take note that on three occasions prior to 1880 this species was referred to in print under the specific name *andamanensis*. The references concerned are :—(i) *Querquedula andamanensis* Tytler, 1867, *Ibis* (2) 3 : 333; (ii) *Nettion andamanensis* Gray (G.R.), 1871, *Handlist Genera Spec. Birds* 3 : 84; (iii) *Anas andamanensis* Giebel, 1872, *Thesaurus Ornith.* 1 : 334. An examination shows that the first of the above papers, the author of which was Beavan, contained under the heading *Querquedula andamanensis* the following note written and initialled by Tytler :—"From the fresh-water creek I obtained a beautiful little teal, which I sent to the Asiatic Society's Museum for identification, but have never heard of it since; it was quite a new species, brown with blue wings, and from the best of my recollection, somewhat like *Q. ipecuteri* (Vieillot) of South America. It was shot out of a flock." Meagre and inadequate as is the foregoing note written by Tytler from memory, the name *andamanensis* so published cannot be dismissed as a *nomen nudum*. This is essentially a *nomen dubium*, but by reason of its date it represents a threat to the stability of the name *albogularis* Hume, 1873, should any author claim to recognise in Tytler's note a description of that species. It should therefore

be suppressed by the Commission under its Plenary Powers for the purposes of the Law of Priority but not of the Law of Homonymy. The name *andamanensis* was published with a full description by Ball in 1873 (*Stray Feathers* 1 : 88) under the name *Querquedula andamanensis*. Under the proposal submitted above, the name *andamanensis* Ball, 1873, will remain invalid as a junior primary homonym of the name *andamanensis* Tytler, 1867, as published in the same combination (*Querquedula andamanensis*) for, as will have been noted, it is part of the proposal submitted that the specific name *andamanensis* Tytler, 1867, should be kept alive for the purposes of the Law of Homonymy. The name *andamanensis* Ball, 1873, should therefore now be placed on the *Official Index of Rejected and Invalid Specific Names in Zoology*. The two other usages of the name *andamanensis* referred to earlier in the present paragraph, namely those by Gray (1871) and Giebel (1872), are found on inspection to be no more than bare catalogue or list entries without descriptive matter of any kind. In view of the trouble which these names have caused in the literature, all three should now be disposed of by being placed on the *Official Index of Rejected and Invalid Specific Names in Zoology*. Finally, it should be noted that Salvadori (1895, *Cat. Birds Brit. Mus.* 27 : 257), who placed this species in the genus *Nettion*, misspelled the specific name *albogularis* as *albigulare*. In view of the importance of the work in which this misspelling occurred, it is likely that a search of the later literature would show that other authors, copying from Salvadori, have also used an incorrect connective vowel when writing this name. The Erroneous Subsequent Spelling *albigulare* Salvadori, 1895, should now be stamped as such by being placed on the *Official Index of Rejected and Invalid Specific Names in Zoology* at the same time as the name *albogularis* Hume, 1873, as published in the combination *Mareca albogularis*, is placed on the *Official List of Specific Names in Zoology*.

20. The fact that Sclater's 1880 usage of the name *Anas punctata* is the first clearly satisfactory usage of that name for the Hottentot Teal has made it necessary to examine the synonymy of no less than five other species, all of which are reputed to have been named *punctata* by one author or another. This examination has shown that in actual fact the name *punctata* was published as a new name for a species of duck on two occasions only, namely by Lesson in 1831 for the Australian Duck named *Mareca castanea* by Eyton in 1838 (paragraph 14 above) and by Reichenbach in 1845 for the species named *Anas erythrorhyncha* by Gmelin in 1789 (paragraph 15 above). The usages of the name *punctata* for the other three species concerned, namely for (a) *Anas* (*Mareca*) *gibberifrons* Müller (S.), 1842 (paragraph 16) ; (b) *Dendrocygna guttata* Schlegel, 1866 (paragraph 17) ; (c) *Mareca albogularis* Hume, 1873 (paragraph 18) are no more than incorrect usages of one or other of the two names cited above. In addition to providing the basis needed for formulating a soundly based proposal for the validation by the Commission under its Plenary Powers of the name *punctata* Sclater, 1880, as the name for the Hottentot Teal (in place of the name *punctata* Burchell, 1822, which hitherto has been incorrectly applied to that species), the examination of the literature summarised in paragraphs 14

to 18 above has served the valuable purpose of unravelling the status of the numerous uses in the literature up to 1880 of the name *punctata* for each of the five species to which that name has been either invalidly or incorrectly applied. Advantage of this survey has been taken also to determine the status of a considerable number of names which have been applied to one or other of the species involved in this case but which on examination of the original publications are found to be mere *nomina nuda*. Such names, especially when published in obscure works not readily accessible to specialists, constitute a serious menace to nomenclatorial stability, for specialists who do not work in one of the relatively small number of large cities possessing rich zoological libraries are quite unable to determine whether these names are available names or whether they should be rejected as possessing no status of availability, being no more than *nomina nuda*. Accordingly, in order to overcome this difficulty so far as the present group is concerned, proposals are now submitted for the final disposal of the names belonging to the foregoing class by their being placed on the *Official Index of Rejected and Invalid Specific Names in Zoology*.

21. For the reasons set forth in the present application the International Commission on Zoological Nomenclature is asked :—

(1) to use its Plenary Powers :—

(a) to suppress the under-mentioned names and usages of names for the purposes both of the Law of Priority and of the Law of Homonymy :—

- (i) *punctata* Burchell, 1822, as published in the combination *Anas punctata* (paragraph 6) ;
- (ii) *punctata* Lesson, 1831, as published in the combination *Anas punctata* (paragraph 14) ;
- (iii) *punctata* Reichenbach, [1845], as published in the combination *Anas punctata* (paragraph 15) ;
- (iv) *punctata*, all usages of, in combination with the generic names *Anas*, *Mareca*, *Nettion* or *Querquedula* subsequent to the usage by Burchell in 1822 in combination with the first of the above generic names and prior to the usage by Sclater in 1880 (*Proc. zool. Soc. Lond.* 1880 : 522) in combination with the fourth of the generic names specified above (paragraphs 10, 16, 18) ;

(b) to suppress the under-mentioned names for the purposes of the Law of Priority but not for those of the Law of Homonymy :—

- (i) *hottentota* Eyton, 1838, as published in the combination *Querquedula hottentota* (paragraph 11) ;

- (ii) *pileata* Lichtenstein (M.H.C.), 1842, as published in the combination *Anas pileata* (paragraph 11);
 - (iii) *madagascariensis* Grandidier, 1867, as published in the combination *Querquedula madagascariensis* (paragraph 11);
 - (iv) *andamanensis* Tytler, 1867, as published in the combination *Querquedula andamanensis* (paragraph 19);
- (c) to direct that the binomen *Querquedula punctata*, as published by Selater (P.L.) in 1880 in the paper specified in (a) (iv) above be treated as being a scientific name (binominal combination) then published for the first time and to validate the above name as so published;
- (d) to direct that the specific name *punctata* Selater, 1880, as published in the combination *Querquedula punctata*, as validated under (c) above be applied to the species figured by Smith (A.) in [1845] as *Querquedula hottentota* on the plate cited by Selater, namely plate 105 in the Aves Section of the work entitled *Illustrations of the Zoology of South Africa*, the specimen so figured to be the holotype of *Querquedula punctata* Selater (P.L.), 1880;
- (2) to place the under-mentioned specific names on the *Official List of Specific Names in Zoology* :—
- (a) *punctata* Selater (P.L.), 1880, as published in the combination *Querquedula punctata*, as validated under the Plenary Powers under (1)(c) above and as defined under the same Powers under (1)(d) above (paragraph 9);
 - (b) *maccoa* Eyton, 1838, as published in the combination *Erismatura maccoa* (paragraph 9);
 - (c) *bernieri* Hartlaub, 1860, as published in the combination *Querquedula bernieri* (paragraph 13);
 - (d) *capensis* Gmelin (J.F.), [1789], as published in the combination *Anas capensis* (paragraph 13);
 - (e) *castanea* Eyton, 1838, as published in the combination *Mareca castanea* (paragraph 14);
 - (f) *erythrorhyncha* Gmelin (J.F.), [1789], as published in the combination *Anas erythrorhyncha* (paragraph 15);
 - (g) *gibberifrons* Müller (S.), 1842, as published in the combination *Anas (Mareca) gibberifrons* (paragraph 16);

- (h) *guttata* Schlegel, 1866, as published in the combination *Dendrocygna guttata* (paragraph 17) ;
 - (i) *albogularis* Hume, 1873, as published in the combination *Mareca albogularis* (paragraph 19) ;
- (3) to place the under-mentioned names and usages of names on the *Official Index of Rejected and Invalid Specific Names in Zoology* :—
- (a) the four names or usages of names specified in (1)(a) above as there suppressed under the Plenary Powers ;
 - (b) the four names specified in (1)(b) above as there suppressed under the Plenary Powers ;
 - (c) *punctata* Finsch, 1865, as published in the combination *Anas punctata* (a *nomen nudum*) (paragraph 17) ;
 - (d) *hottentota* Smith (A.), 1837, as published in the combination *Querquedula hottentota* (a *nomen nudum*) (paragraph 12) ;
 - (e) *hottentota* Smith (A.), [1845], as published in the combination *Querquedula hottentota* (a junior homonym of *hottentota* Eyton, 1838, as published in the combination *Querquedula hottentota*) (paragraph 12) ;
 - (f) *hottentotta* Gray (G.R.), [1845], as published in the combination *Querquedula hottentotta* (an Erroneous Subsequent Spelling for *hottentota* Eyton, 1838, as published in the combination *Querquedula hottentota*) (paragraph 12) ;
 - (g) *assimilis* Schlegel, 1866, as published in the combination *Anas assimilis* (a junior homonym of *assimilis* Forster, 1844, as published in the combination *Anas assimilis*) (paragraph 13) ;
 - (h) *assimilis* Hartlaub, 1877, as published in the combination *Anas assimilis* (a junior homonym of *assimilis* Forster, 1844, as published in the combination *Anas assimilis*) (paragraph 13) ;
 - (i) *maccoa* Smith (A.), 1837, as published in the combination *Oxyura maccoa* (a *nomen nudum*) (paragraph 12) ;
 - (j) the specific name *guttulata* as published in the combination *Dendrocygna guttulata* as a *nomen nudum* (1) by Wallace in 1863 and (2) by Selater (P.L.) in 1864 (paragraph 17) ;
 - (k) *andamanensis* Ball, 1873, as published in the combination *Querquedula andamanensis* (a junior primary homonym of *andamanensis* Tytler, 1867, as published in the combination *Querquedula andamanensis*) (paragraph 19) ;

- (l) the specific name *andamanensis* as published as a *nomen nudum* (1) by Gray (G.R.) in 1871 in combination with the generic name *Nettion*, and (2) by Giebel in 1872 in combination with the generic name *Anas* (paragraph 19) ;
- (m) *albigulare* Salvadori, 1895, as published in the combination *Nettion albigulare* (an Erroneous Subsequent Spelling for *albogularis* Hume, 1873, as published in the combination *Mareca albogularis*) (paragraph 19).

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SUPPORT FOR THE DOS PASSOS/BELL APPLICATION REGARDING THE SPECIMEN TO BE ACCEPTED AS THE LECTOTYPE OF "MEGATHYMUS ARYXNA" DYAR, 1905 (CLASS INSECTA, ORDER LEPIDOPTERA)

By JOHN ADAMS COMSTOCK

(Southern California Academy of Sciences)

(Commission Reference : Z.N.(S.) 889)

(For the proposal submitted, see 1955, *Bull. zool. Nomencl.* 11(9) : 289-294)

(Extract from letter dated 19th May 1956)

I wish to go on record as favoring the position taken by Messrs. dos Passos and Bell.

In a paper now in press, dealing with the life history of *Megathymus evansi* Freeman, I have expressed the same opinion as that voiced in the "Request for a Ruling . . ."

PROPOSED USE OF THE PLENARY POWERS TO VALIDATE THE
GENERIC NAMES "TRINUCLEUS" MURCHISON, 1839, AND
"TRETASPIIS" M^CCOY, 1849 (CLASS TRILOBITA)

By C. J. STUBBLEFIELD, D.Sc., F.R.S.

(Geological Survey and Museum, London)

and

H. B. WHITTINGTON, D.Sc.

(Museum of Comparative Zoology at Harvard College,
Cambridge, Massachusetts, U.S.A.)

(Commission Reference : Z.N.(S.) 926)

The purpose of the present application is to ask the International Commission on Zoological Nomenclature to validate the well-known generic name *Trinucleus* (Class Trilobita) as from Murchison, 1839, and the name *Tretaspis* as from M^CCoy, 1849. For the first of these purposes the use of the Plenary Powers will be needed to suppress the unidentifiable generic name *Trinucleus* Link, 1807, with the specific name *tuberculatus* published by Link in the combination *Trinucleus tuberculatus* on the same occasion. For the second of these purposes the suppression is required of the name *Tretaspis* Murchison, 1839, which, as a junior objective synonym of *Trinucleus* Murchison, 1839, is not required but which at present invalidates the established name *Tretaspis* M^CCoy, 1849.

2. The name *Trinucleus* was first used by Link (1807 : 6) for two trilobite fragments previously illustrated by Walch (1776, Pl. 4, figs. 2, 3). These fragments, which Link named *Trinucleus tuberculatus*, are considered to be specifically and generically unidentifiable (Shaw and Stubblefield, 1950).

3. The next use of the name *Trinucleus* was by Murchison (1839) and the relevant passage with its footnote is quoted below (Murchison, 1839 : 217) :-

... we meet with other forms, including the *Trinucleus*¹, Llhwydd [sic], a genus never observed in the Upper, yet abounding in the Lower Silurian rocks, particularly *T. Caractaci*, Nob., Pl. 23. fig. 1 . . .

¹ Fragments and imperfect specimens only of these Trilobites having been published, I was about to name this genus *Tretaspis* from *τρητή σπις*, a shield perforated or deeply sculptured on its margin, for such is the leading generic distinction ; when considering that an unquestionable species of this genus was long ago figured by Llhwydd (*Lythophyl. Brit. Ichnogr.*, 1699, p. 97, t. 23) as *Trinucleus, fimbriatus*, I have in obedience to the practice of the best zoologists retained the original name.

4. This passage is interpreted as :—

- (a) expressing the author's intention to name the genus being discussed *Trinucleus* ;
- (b) rejecting the still-born name *Tretaspis* Murchison, 1839 ;
- (c) quoting, but not as reinforcing by acceptance or adoption of the pre-Linnean species-name *Trinucleus fimbriatus* Lhwyd, 1699.

5. Later in the same work Murchison (1839 : 659—660) states, below the generic heading *Trinucleus* ("a new genus under an old name"), after the description of "*Trinucleus Caractaci* (n.s.)" and following the subheading "*Trinucleus fimbriatus* (n.s.) Pl. [23], f. 2" and the description of that species, "This is probably the same species figured by Lhwyd [sic], Epist. 1, p. 9, t. 23. I have never found it entire, but the caudal extremity occurring in the same fragment of rock with the buckler, and both agreeing with the fig. of Lhwyd, I have considered them as parts of the same species . . . Loc. near Welsh Pool and Builth".

6. The nominal species *Trinucleus fimbriatus* was selected as the type species of the genus *Trinucleus* Murchison by Vogdes in 1890 (:84). It is important therefore that there should be no doubt as to the identity of the species so named. On the basis of the interpretation given in paragraph 4 above, the name *Trinucleus fimbriatus* is to be regarded as applying to the specimens which Murchison had before at the time when he published this name, and is not to be treated as a mere re-publication of the pre-Linnean name consisting of the same combination published by Lhwyd in 1699. This is fortunate for two reasons ; first, because Lhwyd's specimens cannot now be traced but were certainly not referable to the same species as Murchison's ; second, because a slab from the Murchison Collection, preserved in the Geological Survey Museum in London, registered as Geol. Soc. Coll. 6836, is labelled "*Trinucleus fimbriatus*. Sil. Syst. pl. 23, fig. 2b & c. Spec. figd. Llandeilo Flags, Gwern y fad [Gwern y fed bach] Nr. Builth. R.I. Murchison Esq". There is no evidence that the writing on the label is that of Murchison ; the label was written before 1911, in which year the Geological Society's collection was given to the Geological Survey ; but since Murchison was knighted in 1863 it is reasonable to suppose that the label was written before 1863, also that the slab may contain some of Murchison's syntypes of this species. The slab agrees, moreover, with the rock fragment mentioned by Murchison in the note quoted above in paragraph 5 above. Murchison's original illustration [1839 : Plate 23, fig. 2] is of a slab containing several fossil fragments of which three were indicated respectively by the artist as a, b, and c. The specimen illustrated as fig. 2c is a pygidium [caudal extremity] which was re-identified by Salter [1853 : Decade 7, pl. 7, p. 8] as *Ampyx nudus* Murchison and thus, though forming one of Murchison's syntypes of *T. fimbriatus*, can no longer be acceptable as a lectotype of that species. As stated earlier, the rock fragment

is documented as showing the original of fig. 2b, a fragment of cranidium; doubt exists, however, concerning the identity of the more complete cranidium [buckler] with fig. 2a. There are reasons, nevertheless, for believing that Murchison's illustration of this rock fragment was diagrammatised since the relationship on the slab between the fossils resembling figs. 2a and 2c are approximately as in the illustration but the position of fig. 2b is not as on the slab, nor are the positions of the remaining fossil fragments as they are drawn. Notwithstanding these apparent discrepancies, if the label documentation is correct as far as it concerns fig. 2b and 2c, the more complete cranidium [the buckler] must certainly be a syntype and it is probably the original of fig. 2a which either has been damaged since Murchison's illustration was drawn or the drawing was completed from the additional evidence of another specimen. This more complete cranidium is here selected as the lectotype of *Trinucleus fimbriatus* Murchison, the interpretation of that species being thus placed on a firmer basis.

7. The name *Trinucleus* has been widely and continuously used since Murchison's day in both palaeontological works and in text books of a more general nature. The family name TRINUCLEIDAE was proposed in 1844 and likewise accepted and widely used. Though some have argued correctly (in personal communications) that the name *Trinucleus* has been used in the past in too wide a sense, the restricted usage of today has been clearly understood for many years (see Raymond, 1913 : 711; Störmer, 1930). The case for requesting that the name *Trinucleus* Murchison, 1839, be conserved, and the unused name *Trinucleus* Link, 1807, be suppressed, is clear and strong. The substitute name *Edgellia* Shaw (A.B.), 1950 (*in* Shaw & Stubblefield, *J. Paleont.* 24(5) : 624) has not won acceptance and its adoption would lead to serious disturbance in current practice. At the same time that the name *Trinucleus* Link is suppressed the unidentifiable name *tuberculatus* published by Link in the combination *Trinucleus tuberculatus* on the same occasion should also be suppressed.

8. In 1849 (:410) McCoy proposed the name *Tretaspis* for a new genus of trilobites, citing two species, the first mentioned of which was *Asaphus seticornis* Hisinger, 1840 (: 3) later selected as the type species by Bassler (1915 : 1285). The name *Tretaspis* has been widely used in both Europe and America (Ruedemann, 1901 : 41) for many years, especially since Störmer (1930 : 55) redescribed the type species in detail. For fifteen or more years Scandinavian geologists have been using the term "*Tretaspis* shales" for rocks in which this genus occurs, rather than the older term "*Trinucleus* shales" ("*Trinucleus*" being used here in a generalised sense). There seems to be an equally strong case, therefore, for requesting that the name *Tretaspis* be conserved as from McCoy, 1849, by the suppression under the Plenary Powers of the name *Tretaspis* Murchison, 1839, which, as has been explained, has never been used.

9. Each of the generic names dealt with in the present application has been taken as the base for a family-group name. The first of the genera concerned is, as has already been noted (paragraph 7 above), the type genus of the universally recognised family TRINUCLEIDAE. This family-group name is always treated by writers on trilobites as having been first published by Emmrich (H. [F.]) in 1844 (*Zur Naturgeschichte der Trilobiten* : 17). Emmrich published this name in the form TRINUCLEEN, which has the appearance of being a vernacular (German) word rather than a Latinised word. The next author to give this family-group taxon a name was Corda (A.J.), 1847 (*in* Hawle (I.) & Corda (A.J.), *Prodrom einer Monogr.* : 36), who used the spelling TRINUCLEIDES. The first author to use this family-group name in an indisputably Latin form was Salter (J.W.) who in 1864 (*Mon. Brit. Trilobites* (Palaeont. Soc.) : 2) used the name in the form TRINUCLEIDAE. Other things being equal, the correct course would be to attribute to Salter (1864) the family-group name based on *Trinucleus*, but in the present case this would lead to exactly the result which it was the object of the Fourteenth International Congress of Zoology, Copenhagen, 1953, to avoid, when it laid down that a family-group name may be accepted as from a date on which it was published in a vernacular form instead of in a Latin form where this is necessary in the interests of stability in nomenclature (1953, *Copenhagen Decisions zool. Nomencl.* : 35—36, Decision 53(2)). For if the family-group name based upon *Trinucleus* were accepted as ranking only from Salter, 1864, it would fall as a junior subjective synonym of CRYPTOLITHIDAE Angelin, 1854 (*Palaeont. scand.* 1 Crustacea : 64) (type genus : *Cryptolithus* Green, 1832). In these circumstances the family-group name based on *Trinucleus* is properly acceptable as from Emmrich, 1844, the author who, as already explained, is always credited with this name by trilobite workers. The second generic name dealt with in the present application, *Tretaspis* McCoy, 1849, has been taken as the base for a subfamily name TRETASPINAE by Whittington (H.B.) in 1941 (*J. Paleont.* 15 : 23).

10. For the reasons set forth in the present application it is here asked that the International Commission on Zoological Nomenclature should :—

(1) use its Plenary Powers for the purpose of suppressing the under-mentioned names to the extent severally shown below :—

(a) to be suppressed for the purposes of both the Law of Priority and the Law of Homonymy :—

(i) *Trinucleus* Link, 1807 ;

(ii) *Tretaspis* Murchison, 1839 ;

(b) to be suppressed for the purposes of the Law of Priority but not for those of the Law of Homonymy : *tuberculatus* Link, 1807, as published in the combination *Trinucleus tuberculatus* ;

(2) place the under-mentioned generic names on the *Official List of Generic Names in Zoology* :—

- (a) *Trinucleus* Murchison, 1839, as validated under the Plenary Powers under (1)(a)(i) above (gender : masculine) (type species, by selection by Vogdes (1890) : *Trinucleus fimbriatus* Murchison, 1839, as defined by the lectotype selected in paragraph 6 of the present application) ;
- (b) *Tretaspis* McCoy, 1849, as validated under the Plenary Powers under (1)(a)(ii) above (gender : feminine) (type species, by selection by Bassler (R.S.) (1915) : *Asaphus seticornis* Hisinger, 1840) ;

(3) place the under-mentioned specific names on the *Official List of Specific Names in Zoology* :—

- (a) *fimbriatus* Murchison, 1839, as published in the combination *Trinucleus fimbriatus* and as defined by the lectotype specified in (2)(a) above (specific name of type species of *Trinucleus* Murchison, 1839) ;
- (b) *seticornis* Hisinger, 1840, as published in the combination *Asaphus seticornis* (specific name of type species of *Tretaspis* McCoy, 1849) ;

(4) place the under-mentioned generic names on the *Official Index of Rejected and Invalid Generic Names in Zoology* :—

- (a) the generic names specified respectively in (1)(a)(i) and (1)(a)(ii) above, as there suppressed under the Plenary Powers ;
- (b) *Edgellia* Shaw (A.B.), 1950 (a junior objective synonym of *Trinucleus* Murchison, 1839, as validated under the Plenary Powers under (1)(a)(i) above) ;

(5) place the under-mentioned specific name on the *Official Index of Rejected and Invalid Specific Names in Zoology* : *tuberculatus* Link, 1807, as published in the combination *Trinucleus tuberculatus*, as suppressed under the Plenary Powers under (1)(b) above ;

(6) place the under-mentioned family-group names on the *Official List of Family-Group Names in Zoology* :—

- (a) TRINUCLEIDAE (correction of TRINUCLEEN) Emmrich (H.[F.]), 1844 (type genus : *Trinucleus* Murchison, 1839) ;
- (b) TRETASPINAE Whittington (H.B.), 1941 (type genus : *Tretaspis* McCoy, 1849) ;

(7) place on the *Official Index of Rejected and Invalid Family-Group Names in Zoology* the under-mentioned family-group names, each of which is an Invalid Original Spelling for TRINUCLEIDAE (type genus: *Trinucleus* Murchison, 1839:—

(a) TRINUCLEEN Emmrich (H.), 1844;

(b) TRINUCLEIDES Corda (A.J.), 1847.

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PROPOSED USE OF THE PLENARY POWERS TO RENDER THE
GENERIC NAME "PANULIRUS" WHITE, 1847 (CLASS CRUSTACEA,
ORDER DECAPODA) THE OLDEST AVAILABLE NAME FOR THE
GENUS CONCERNED AND MATTERS INCIDENTAL THERETO

By L. B. HOLTHUIS

(*Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands*)

(Commission Reference : Z.N.(S.) 1030)

The present application relates to the name *Panulirus* White, 1847, which is widely used among carcinologists for a genus of Spiny Lobsters. This name is invalid since it is a junior subjective synonym of the name *Phyllosoma* Leach, 1818, which until now has only been used to indicate larval stages. A strict application of the Law of Priority would result here in considerable confusion, for the prevention of which the International Commission on Zoological Nomenclature is asked to make use of its Plenary Powers.

2. The original references to the generic names dealt with here are the following :—

Panulirus White, 1847, *List Crust. Brit. Mus.* : 69 (type species, by present selection : *Palinurus japonicus* Von Siebold, 1824, *Hist. nat. Japon.* : 15) (gender : masculine) ;

Phyllosoma Leach, 1818, *J. Phys. Chim. Hist. nat. Arts* 86 : 306 (type species, by present selection : *Phyllosoma commune* Leach, 1818, *J. Phys. Chim. Hist. nat. Arts* 86 : 307) (gender : neuter) ;

Senex Pfeffer, 1881, *Verh. naturwiss. Ver. Hamburg* 5 : 30 (a substitute name for *Panulirus* White, 1847) (invalid, because a junior homonym of *Senex* Gray (J.E.), [1838] (*Zool. Voy. Beagle* 3(3) : 13)) (gender : masculine).

3. Till 1847 the Spiny Lobsters were considered to belong to one genus, *Palinurus* Fabricius, 1798. Then White (1847) split this genus into three genera, to one of which he gave the new name *Panulirus*. Practically all subsequent authors who recognised the distinctness of White's genus from *Palinurus* Fabricius adopted the name *Panulirus* for it. Only a few zoologists objected to the name *Panulirus* as, in their opinion, it resembled too much that of *Palinurus* ; these authors substituted the name *Senex* Pfeffer, 1881, for

Panulirus White. *Senex* Pfeffer, however, besides being a junior objective synonym of *Panulirus* White, is a junior homonym of *Senex* Gray, 1838, and thus is invalid for two reasons. *Panulirus* White has been adopted by more than 150 authors, while the name *Senex* for this genus has been used by about 11 authors, at least 5 of which later started to use White's name.

4. In 1818, Leach described a new genus of Crustacea which he named *Phyllosoma* and which later proved to be based on the larval stages of species of PALINURIDAE and SCYLLARIDAE. Leach included four species in his genus for which, as far as is known to me, no type species has ever been indicated. Therefore I select now in accordance with Recommendation (m) in Article 30 of the *Règles*, as the type species of the genus *Phyllosoma* Leach, 1818, the nominal species *Phyllosoma commune* Leach, 1818. This species, as is distinctly shown by Leach's description and figure, is the larval stage of a species of *Panulirus*. It was reported by Leach from Porto-Praya, Cape Verde Islands, and from off the coast of French Congo ($2^{\circ} 58' 0''$ S, $9^{\circ} 21' 22''$ E); the latter locality, being the more accurate of the two, is selected here as the restricted type locality of *Phyllosoma commune*. The only species of Spiny Lobster occurring in this region is the one known under the names of *Panulirus rissonii* (Desmarest, 1825) (= *Palinurus rissonii* Desmarest, 1825, *Consid. gén. Class. Crust.*: 185) or *Panulirus regius* de Brito Capello, 1864 (*Mem. Acad. Sci. Lisboa*, Class. Sci. math. phys. nat. (2) 3: 5). The species *Panulirus guttatus* (Latreille, 1804), it is true, has been reported several times from the west coast of Africa (cf. Bouvier, 1905, *Bull. Mus. océanogr. Monaco* 29: 1-6), who believed that species to occur at the Cape Verde Islands, Liberia, Dahomey and Sao Thomé). Gruvel (1913, *Ann. Inst. océanogr. Paris* 3(4): 30, 36), however, was able to prove that practically all of these records were based on specimens of *P. rissonii*. The only certain record of the occurrence of *P. guttatus* in the West African region is that by Dr. Th. Monod, Director of the Institut Français d'Afrique Noire in Dakar, who in a recent letter informed me that one of his collaborators had obtained three specimens of that species from the Cape Verde Islands. Other records of this species are from the east coast of America (Bermuda to Sao Paulo, Brazil) and from the Atlantic Islands of St. Pauls Rocks and Ascension. Gurney (1936, *Discov. Rep.* 12: 405-415) when dealing with the South Atlantic species of Phyllosomas, recognized two forms (named Form A and B by him) which belong to the genus *Panulirus*. Gurney's description and figures clearly show that his Form A is identical with *Phyllosoma commune*, while his Form B is different. Gurney arrived at the conclusion, based on abundant material, that his form B probably is the *Phyllosoma* of the American *P. argus* (Latreille), Form A being that of *Panulirus regius*. When the localities of Gurney's Form A and B are put out on a map, we find that in the samples taken off the West African coast only Form A is represented, except in one sample from near the Cape Verde Islands, which contains both Form A and B. Form B furthermore occurred plentifully near St. Paul's Rocks (often together with Form A) and in several samples taken off the N.E. coast of Brazil. This evidence shows that there can be little

doubt that Gurney's identification of Form A with *Panulirus regius* (= *P. rissonii*) is correct, so that the names *Phyllosoma commune* Leach, 1818, *Palinurus rissonii* Desmarest, 1825 and *Panulirus regius* de Brito Capello, 1864, are synonyms. As Dr. Th. Monod has pointed out to me, the distribution of Gurney's Form B makes it probable that this form is the larval stage of *P. guttatus* rather than that of *P. argus*, but this question is not relevant here.

5. If the normal provisions of the *Règles* are strictly adhered to in the present case, the generic name *Panulirus* White, 1847 would have to be replaced by the name *Phyllosoma* Leach, 1818, while the specific name *rissonii* Desmarest, 1825 would have to give way to *commune* Leach, 1818. However, *Phyllosoma* at present is hardly ever used as a generic name, but has more or less become a term to indicate larval forms (Phyllosomas or phyllosomastages) not only of the genus *Panulirus*, but also of all the genera of the families PALINURIDAE and SCYLLARIDAE. Furthermore, as has already been pointed out, the generic name *Panulirus* White has become deeply rooted in carcinological nomenclature. It is clear therefore that the replacement of this generic name by that of *Phyllosoma* would greatly upset the stability of carcinological nomenclature and the use by the International Commission on Zoological Nomenclature of its Plenary Powers to prevent this confusion seems to be fully justified. The suppression of the generic name *Phyllosoma* of course will not prevent the word "Phyllosoma" from being available as a term to indicate larval forms.

6. A second problem which calls for consideration is concerned with the specific name of the West African Spiny Lobster. Until recently the specific name *regius* de Brito Capello, 1864, was used by the majority of carcinologists. In 1946 (*Temminckia* 7 : 122), however, the present author pointed out that the species, *Panulirus regius* de Brito Capello, had been described as early as 1825 under the name *Palinurus rissonii* Desmarest (1825, *Consid. gén. Classe Crust.* : 185). As Desmarest's name has priority over that given by de Brito Capello, I substituted the former for the latter. So far as is known to me eight authors have dealt with the present species after 1946, five of these continued to use the specific name *regius*, while three adopted *rissonii*. We find therefore that the name *rissonii* at present is very little used and that there is no reason to preserve it by making use of the Plenary Powers of the International Commission. It has been pointed out already that the oldest name for the species in all probability is *commune* Leach, 1818. Though the evidence that *Phyllosoma commune* Leach, 1818 is identical with *Panulirus regius* de Brito Capello, 1864, is very convincing, it is not conclusive as long as one of these nominal species has not been reared from the other, and as long as it is not proved that *Phyllosoma commune* is not the larva of a related species. Furthermore, the name *commune* has hardly ever been used during the last 100 years, while the authors using it before that time evidently confused several species under it, since it is reported by those authors both from West Africa and the Indo-West Pacific region. For these reasons it seems better to suppress this name

altogether. As already pointed out above the name *rissonii* has hardly ever been used in carcinological literature, the name *regius* being the one generally adopted by carcinologists. This species is of economic importance for it is caught for food in West Africa and even exported to Europe. The literature dealing with it is however not very extensive. I know of only about 35 authors who have dealt with this species. Of these, 25 used the name *regius*, and six that of *rissonii*. Since in Gruvel's (1911, *Ann. Inst. océanogr. Paris* 3(4)) monograph of the PALINURIDAE as well as in the economic and general papers of that author the name *regius* always has been used, it seems worth while to preserve this name.

7. The genus *Panulirus* White is currently referred to the family PALINURIDAE and accordingly no family-group-name problem arises in this case.

8. The concrete proposals which I now submit for consideration are that the International Commission on Zoological Nomenclature should :—

- (1) use its Plenary Powers to suppress the under-mentioned names for the purposes of the Law of Priority but not for those of the Law of Homonymy :—

- (a) the generic name *Phyllosoma* Leach, 1818 ;

- (b) the following specific names :—

- (i) *commune* Leach, 1818, as published in the combination *Phyllosoma commune* ;

- (ii) *rissonii* Desmarest, 1825, as published in the combination *Palinurus rissonii* ;

- (2) place the under-mentioned generic name on the *Official List of Generic Names in Zoology* :—*Panulirus* White, 1847 (gender : masculine) (type species, by selection by Holthuis (in paragraph 1 of the present application) : *Palinurus japonicus* von Siebold, 1824) ;

- (3) place the under-mentioned specific names on the *Official List of Specific Names in Zoology* :—

- (a) *japonicus* von Siebold, 1824, as published in the combination *Palinurus japonicus* (specific name of type species of *Panulirus* White, 1847) ;

- (b) *regius* de Brito Capello, 1864, as published in the combination *Panulirus regius* ;

(4) place the under-mentioned generic names on the *Official Index of Rejected and Invalid Generic Names in Zoology* :—

(a) *Phyllosoma* Leach, 1818, as suppressed under the Plenary Powers under (1)(a) above ;

(b) *Senex* Pfeffer, 1881 (a junior homonym of *Senex* Gray (J.E.), [1838], and a junior objective synonym of *Panulirus* White, 1847) ;

(5) place on the *Official Index of Rejected and Invalid Specific Names in Zoology* the specific names specified above in (1)(b)(i) and (1)(b)(ii) respectively as there suppressed under the Plenary Powers.

**SUPPORT FOR THE VALIDATION UNDER THE PLENARY POWERS
OF THE GENERIC NAME " UNIO " PHILIPSSON, 1788 (CLASS
PELECYPODA)**

By **HENNING LEMCHE**

(*Universitetets Zoologiske Museum, Denmark*)

(**Commission Reference : Z.N.(S.) 451**)

(For the proposal in this case see *Bull. zool. Nomencl.* **11** : 337—343)

(Letter dated 24th May 1956)

Concerning the names *Lymnaea* and *Unio*, I would like to give my strongest support to the proposal presented by Dr. Ellis.

**PROPOSED USE OF THE PLENARY POWERS TO SUPPRESS THE
GENERIC NAME "CRYPTONYMUS" EICHWALD, 1825 (CLASS
TRILOBITA) FOR PURPOSES OF THE LAW OF PRIORITY BUT
NOT FOR THOSE OF THE LAW OF HOMONYMY**

By **VALDAR JAANUSSON**

(*Paleontologiska Institutionen, Uppsala Universitet, Sweden*)

(Commission Reference : Z.N.(S.) 1068)

The object of the present application is to ask the International Commission on Zoological Nomenclature to use its Plenary Powers to suppress the generic name *Cryptonymus* Eichwald, 1825 (Class Trilobita), thereby avoiding the serious confusion which would inevitably result from the application of the normal provisions of the *Règles* in this case. It is hoped that it will be possible for the International Commission to give an early decision on the present application, since that decision is urgently required in connection with the preparation of the relevant portion of the forthcoming *Treatise on Invertebrate Paleontology*. The details relating to this case are set out in the following paragraphs.

2. The generic name *Cryptonymus* was published by Eichwald in 1825 (: 44). The following eight nominal species were included in the genus: *Cryptonymus schlotheimii* n. sp., *C. weissii* n. sp., *C. panderii* n. sp., *C. lichtensteinii* n. sp., *C. rosenbergii* n. sp., *C. wahlenbergii* n. sp. *C. rudolphii* n. sp., and *C. parkinsonii* n. sp. The first four of these species belong to the family ASAPHIDAE, in its current delimitation, and the last four to the family ILLAENIDAE. None of these eight species has ever been designated as the type species of the genus *Cryptonymus*.

3. The four asaphid species were considered by Fr. Schmidt (1898 : 3) in connection with his monographic treatment of the east Baltic asaphid trilobites. He found that all these species were unrecognizable if based only on the descriptions and figures by Eichwald (1825) ("keine von diesen lässt sich mit Sicherheit auf eine bestimmte Art zurückführen"). As the original material cannot be traced, these species were considered as *nomina dubia* by Jaanusson (1953 : 393).

4. The four illaenid species of Eichwald (1825) were discussed by G. Holm (1886) in his monograph on the east Baltic illaenid trilobites. Again, the original material cannot be traced, but on the basis of Eichwald's descriptions and figures Holm concluded that *Cryptonymus rosenbergii*, *C. rudolphii*, and *C. parkinsonii* could not be identified with certainty, whereas *C. wahlenbergii*

Eichwald, 1825, is a senior subjective synonym of the species described by Holm in the same paper as *Illaeus revaliensis* n. sp. (Holm, 1886 : 48). Jaanusson (1954 : 553) considered the first three species of *Cryptonymus* mentioned above as *nomina dubia*. *Cryptonymus wahlenbergii* was, however, considered by him as a recognizable species and was listed as *Illaeus wahlenbergi* (Eichwald, 1825), *Illaeus revaliensis* Holm, 1886, being treated as a junior subjective synonym of it.

5. The generic name *Cryptonymus* was transferred by Eichwald (1840) into an entirely different group of trilobites, the encrinurids, and on the same occasion the species originally included by him (1825) in *Cryptonymus* were placed in the genera *Asaphus* and *Illaeus*. This change of the original concept of the genus is nomenclatorially quite invalid and need not be considered herein.

6. In a series of subsequent papers, especially in the paper of 1860, Eichwald redescribed his species of 1825, now usually placed in the genera *Asaphus*, *Niobe*, and *Illaeus*. Regarding Eichwald's redescrptions Fr. Schmidt (1898 : 7) stated that "Eichwald hat . . . alle seine alten im Jahre 1825 aufgestellten Arten zu retten und durch neue Beschreibungen und Abbildungen näher zu begründen gesucht. Einem Zusammenhang zwischen den alten und neuen Darstellungen nachzuweisen ist ihm nicht gelungen." In several cases it is fully evident that Eichwald's redescription of one or other of his species of 1825 is based on specimens specifically quite different from those originally figured and described. Holm (1886) also arrived at the same conclusion with respect to the illaeid species of Eichwald, 1825. For this reason the later papers of Eichwald cannot be used to define the nominal species established by him in 1825. Since 1886 the specific names of *Cryptonymus*—species described in Eichwald 1825 have not been used in the literature except by Jaanusson (1954) who considered the rejection of *C. wahlenbergii* by Holm (1886) to be nomenclatorially invalid.

7. Salter (1866 : 147) treated *Cryptonymus* Eichwald, 1825, as the nominate subgenus of *Asaphus* and listed *Asaphus expansus* Linnaeus (=Wahlenberg 1821) and *A. raniceps* Dalman, [1827], as types. This too is not in accordance with the *Règles* as (1) the correct name of the nominate subgenus of *Asaphus* is *Asaphus* (*Asaphus*), and (2) none of the species considered by Salter to belong to *Cryptonymus* was originally included in this genus by Eichwald. *Entomostracites expansus* Wahl. was, on the contrary, regarded by Eichwald (1825 : 42) as belonging to *Asaphus*.

8. The only species originally included in *Cryptonymus* Eichwald, 1825, which is taxonomically recognizable, is *C. wahlenbergii* Eichwald, 1825. If, however, this species were to be selected as the type species of the genus *Cryptonymus*, the latter would become a senior subjective synonym of the well-known and widely distributed trilobite generic name *Illaeus* Dalman,

[1827], type genus of the family ILLAENIDAE, and this would cause serious confusion both in trilobite taxonomy and in Ordovician stratigraphy. If one of the three other illaenid species originally included in *Cryptonymus* by Eichwald, 1825, but since 1886 generally regarded as *nomina dubia* (although determinable at the generic level), were to be selected as the type species of *Cryptonymus* the result would be similar, but the confusion would be even worse owing to the uncertainty of the characters of the type species. If one of the four unrecognizable *Asaphus* species were to be selected as the type species of *Cryptonymus* Eichwald, 1825, the latter would become a junior subjective synonym of *Asaphus* Brongniart in Brongniart & Desmarest, 1822. As, however, the genus *Asaphus* is now divided into several subgenera, and the subgeneric position of these four species is very uncertain, it would cause serious confusion in the taxonomic subdivision of the genus *Asaphus*.

9. For the foregoing reasons it is considered that in the interests of nomenclatorial stability and in order to avoid confusion, it is important that the Commission should suppress the generic name *Cryptonymus* Eichwald, 1825. It is further proposed that the generic name *Illaenus* Dalman, [1827] (: 248) (type species, by subsequent selection by Miller (1889 : 550) : *Entomostracites crassicauda* Wahlenberg, 1821 : 27), the name which will be safeguarded by the action now proposed, should be placed on the *Official List of Generic Names in Zoology*.

10. Of the generic names dealt with in the present application the name *Cryptonymus* Eichwald, 1825, has not been taken as the base for a family-group name. As already noted, the generic name *Illaenus* Dalman, [1827], is the type genus of the well-known family ILLAENIDAE. This family-group taxon was established in 1847 by Hawle & Corda (: 51), by whom it was spelled in the incorrect form ILLAENIDES. It was corrected to ILLAENIDAE by Angelin in 1854 (: 41). In its corrected form this name should now be placed on the *Official List of Family-Group Names in Zoology*, the Invalid Original Spelling ILLAENIDES being at the same time placed on the corresponding *Official Index*.

11. In view of these facts I ask that the International Commission on Zoological Nomenclature should :—

- (1) use its Plenary Powers to suppress the generic name *Cryptonymus* Eichwald, 1825, for the purposes of the Law of Priority but not for those of the Law of Homonymy ;
- (2) place the generic name *Cryptonymus* Eichwald, 1825, as suppressed under the Plenary Powers under (1) above, on the *Official Index of Rejected and Invalid Generic Names in Zoology* ;
- (3) place the generic name *Illaenus* Dalman, [1827] (type species, by subsequent selection by Miller (1889) : *Entomostracites crassicauda* Wahlenberg, 1821) on the *Official List of Generic Names in Zoology* ;

- (4) place the specific name *crassicauda* Wahlenberg, 1821, as published in the combination *Entomostracites crassicauda* (specific name of type species of *Illaeus* Dalman, [1827]) on the *Official List of Specific Names in Zoology*;
- (5) place the family-group name ILLAENIDAE (correction of ILLAENIDES) Hawle & Corda, 1847 (type genus: *Illaeus* Dalman, [1827]) on the *Official List of Family-Group Names in Zoology*;
- (6) place the family-group name ILLAENIDES Hawle & Corda, 1847 (type genus: *Illaeus* Dalman, [1827]) (an Invalid Original Spelling of ILLAENIDAE) on the *Official Index of Rejected and Invalid Family-Group Names in Zoology*.

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**SUPPORT FOR DR. JAANUSSON'S APPLICATION REGARDING THE
NAME "CRYPTONYMUS" EICHWALD, 1825 (CLASS TRILOBITA)**

By C. J. STUBBLEFIELD

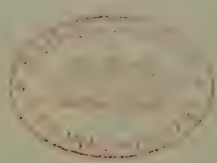
(Geological Survey and Museum, Exhibition Road, London, S.W.7)

(Commission's reference : Z.N.(S.) 1068)

(For the proposal submitted see 1955, *Bull. zool. Nomencl.* 12 : 60—64)

(Letter dated 2nd February 1956)

I support the application of Dr. V. Jaanusson for the suppression of *Cryptonymus* Eichwald, 1825, for the purposes of the Law of Priority but not for those of the Law of Homonymy because I believe this action to be in the best interests of stability of nomenclature in the Trilobita.



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THE BULLETIN OF ZOOLOGICAL NOMENCLATURE

The Official Organ of
**THE INTERNATIONAL COMMISSION ON
ZOOLOGICAL NOMENCLATURE**



Edited by
FRANCIS HEMMING, C.M.G., C.B.E.

Secretary to the International Commission on Zoological Nomenclature

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Dr. L. B. Holthuis (*Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands*) (12th August 1953)

Dr. K. H. L. Key (*Commonwealth Scientific and Industrial Research Organisation, Canberra, A.C.T., Australia*) (15th October 1954)

Dr. Alden H. Miller (*Museum of Vertebrate Zoology, University of California, Berkeley, California, U.S.A.*) (29th October 1954)

Doc. Dr. Ferdinand Prantl (*Národní Museum v Praze, Prague, Czechoslovakia*) (30th October 1954)

Professor Dr. Wilhelm Kühnelt (*Zoologisches Institut der Universität, Vienna, Austria*) (6th November 1954)

Professor F. S. Bodenheimer (*The Hebrew University, Jerusalem, Israel*) (11th November 1954)

Professor Ernst Mayr (*Museum of Comparative Zoology at Harvard College, Cambridge, Massachusetts, U.S.A.*) (4th December 1954)

Professor Enrico Tortonese (*Museo di Storia Naturale "G. Doria," Genova, Italy*) (16th December 1954)

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NOTICES PRESCRIBED BY THE INTERNATIONAL CONGRESS OF ZOOLOGY

The following notices are given in pursuance of decisions taken, on the recommendation of the International Commission on Zoological Nomenclature (see 1950, *Bull. zool. Nomencl.* 4 : 51—56, 57—59), by the Thirteenth International Congress of Zoology, Paris, July 1948 (see 1950, *Bull. zool. Nomencl.* 5 : 5—13, 131).

(a) Date of commencement by the International Commission on Zoological Nomenclature of voting on applications published in the "Bulletin of Zoological Nomenclature"

NOTICE is hereby given that normally the International Commission will start to vote upon applications published in the *Bulletin of Zoological Nomenclature* on the expiry of a period of six calendar months from the date of publication in the *Bulletin* of the applications in question. Any specialist who may desire to comment upon any of the applications published in the present Part (Vol. 12, Part 3) of the *Bulletin* is accordingly invited to do so in writing to the Secretary to the Commission, as quickly as possible and in any case, in sufficient time to enable the communication in question to reach the Secretariat of the Commission before the expiry of the six-month period referred to above.

(b) Notice of the possible use by the International Commission on Zoological Nomenclature of its Plenary Powers in certain cases

NOTICE is hereby given that the possible use by the International Commission on Zoological Nomenclature of its Plenary Powers is involved in applications published in the present Part of the *Bulletin of Zoological Nomenclature* in relation to the under-mentioned names :—

- (1) *Lepidurus* Leach, 1819, validation of ; *Triops* Schrank, 1803, determination of gender of, and designation of a type species for, in harmony with accustomed usage (Class Crustacea, Order Phyllopoda) (Z.N.(S.) 1020) ;
- (2) APODINAE Hartert, 1897, validation of as the family-group name for the Swift (Class Aves) (Z.N.(S.) 1020) ;

Notices prescribed by the International Congress of Zoology (*continued*)

- (3) *volvulus* (emend. of *volvulus*) (*Filaria*), validation of, as from Leuckart, [1892] (Class Nematoda) (Z.N.(S.) 877) ;
- (4) *Asaphus* Brongniart, 1822, validation of, and designation for of a type species in harmony with accustomed usage ; *cornigerus* Schlotheim, 1820 (*Trilobites*), suppression of (Class Trilobita) (Z.N.(S.) 636).

2. Comments received in sufficient time will be published in the *Bulletin* : other comments, provided that they are received within the prescribed period of six calendar months from the date of publication of the present Part will be laid before the International Commission on Zoological Nomenclature at the time of commencement of voting on the application concerned.

3. In accordance with the procedure agreed upon at the Session held by the International Commission on Zoological Nomenclature in Paris in 1948 (see 1950, *Bull. zool. Nomencl.* 4 : 56), corresponding Notices have been sent to the serial publications *Nature* and *Science*.

FRANCIS HEMMING

*Secretary to the International Commission on
Zoological Nomenclature*

28 Park Village East, Regent's Park,
LONDON, N.W.1, England.

26th June 1956.

PROPOSED USE OF THE PLENARY POWERS (a) TO VALIDATE THE GENERIC NAME "LEPIDURUS" LEACH, 1819, AND TO DESIGNATE A TYPE SPECIES FOR, AND TO DETERMINE THE GENDER OF, "TRIOPS" SCHRANK, 1803 (CLASS CRUSTACEA, ORDER PHYLLOPODA) AND (b) TO VALIDATE THE FAMILY NAME "APODIDAE" HARTERT, 1897 (CLASS AVES)

By L. B. HOLTHUIS

(*Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands*)

and

FRANCIS HEMMING, C.M.G., C.B.E. (*London*)

(Commission Reference : Z.N.(S.) 1020)

Introductory

The controversy existing amongst carcinologists as to the correct names that have to be applied to the two Phyllopod genera that by different authors have been indicated as *Apos*, *Apus*, *Binoculus*, *Lepidurus* or *Triops*, has caused a considerable instability in the nomenclature of this group. Furthermore this question not only concerns carcinological, but also involves ornithological nomenclature. Therefore a final decision on this problem by the International Commission on Zoological Nomenclature is highly desirable.

2. The following are the references to Crustacean genera dealt with in this proposal :

Apus Schaeffer, 1756, *Krebsart. Kiefenfuss* : 131 (type species, by selection by E. Desmarest (1858, Chenu's *Ency. Hist. nat.* (Crust.) : 59) : *Apus cancri-formis* Bosc [1801-1802] *Hist. nat. Crust.* 2 : 244) (gender : masculine)

Binoculus Geoffroy, 1764, *Hist. abrg. Ins. Env. Paris* 2 : 658 (type species, by selection by Fowler (1912, *Ann. Rep. New Jersey State Mus.* 1911 : 466) : *Monoculus apus* Linnaeus, 1758, *Syst. Nat.* (ed. 10) 1 : 635) (gender : masculine)

Binoculus Müller (O.F.), 1776, *Zool. dan. Prodr.* : 200 (type species, by selection by Fowler (1912, *Ann. Rep. New Jersey State Mus.* 1911 : 466) : *Binoculus palustris* Müller (O.F.), 1776, *Zool. dan. Prodr.* : 200 (a junior objective synonym of *Monoculus apus* Linnaeus, 1758) (gender : masculine)

Apos Scopoli, 1777, *Intr. Hist. nat.* : 404 (type species, by monotypy : *Monoculus apus* Linnaeus, 1758, *Syst. Nat.* (ed. 10) 1 : 635) (gender : masculine)

Apus Cuvier, [1797–1798], *Tabl. élém. Hist. nat. Anim.* : 700 (nomen nudum)

Apus Cuvier, 1800, *Leçons Anat. Comp.* 1 : tabl. 7 (type species by absolute tautonymy : *Monoculus apus* Linnaeus, 1758, *Syst. Nat.* (ed. 10) 1 : 635) (gender : masculine)

Apus Latreille, [1802–1803], *Hist. nat. gén. partic. Crust. Ins.* 3 : 16 (type species by monotypy) : *Monoculus apus* Linnaeus, 1758, *Syst. Nat.* (ed. 10) 1 : 635) (gender : masculine)

Triops Schrank, 1803, *Fauna boica* 3(1) : 180, xvii (type species, by monotypy : *Binoculus palustris* Müller (O.F.), 1776, *Zool. dan. Prodr.* : 200 (a junior objective synonym of *Monoculus apus* Linnaeus, 1758) (gender : masculine)

Apodium Rafinesque, 1814, *Princip. fond. somiol.* : 29 (a substitute name for *Apus* Latreille [1802–1803]) (gender : neuter)

Phyllopus Rafinesque, 1815, *Analyse Nature* : 99 (a substitute name for *Apus* Latreille [1802–1803]) (gender : masculine)

Lepidurus Leach, 1819, *Dict. Sci. nat.* 14 : 539 (type species, by monotypy : *Monoculus apus* Linnaeus, 1758, *Syst. Nat.* (ed. 10) 1 : 635) (gender : masculine)

Monops Billberg, 1820, *Enum. Ins. Mus. Billberg.* : 132 (type species, by monotypy : *Monoculus apus* Linnaeus, 1758) (gender : masculine)

Trinoculus Voigt, 1836, Cuvier's *Thierreich* (ed. 2) 4 : 275 (a substitute name for *Apos* Scopoli, 1777) (gender : masculine)

Apus Schoch, 1868, *Mikr. Thiere* 2 : iii, 21 (Class Rotifera)

Proterothriops Ghigi, 1921, *Atti Soc. Ital. Sci. nat.* 60 : 163, 166 (type species, by original designation : *Apus numidicus* Grube, 1865, *Arch. Naturgesch.* 31 : 278) (gender : masculine)

History of the genera of Crustacea involved

3. Under the name *Apus cancriformis*, Schaeffer, in his pre-Linnean (1756) paper "Der krebstartige Kiefenfuss mit der kurzen und langen Schwanzklappe", gave good descriptions and excellent figures of the two species of Phyllopods with which we are concerned here. One of the species, here for convenience named species "A", was extensively figured by Schaeffer on pls. 1–5 of his work, while he accurately figured the second species, here named species "B", on his pl. 6.

4. Linnaeus in the Tenth Edition of his *Systema Naturae* included both species in his nominal species *Monoculus apus*, which therefore was a composite species. All subsequent authors of the XVIIIth Century followed Linnaeus in considering "A" and "B" as one species.

5. Geoffroy (1764) removed *Monoculus apus* from the genus *Monoculus* and placed it in his new genus *Binoculus*, referring to the species as *Binoculus cauda biseta*. Geoffroy's *Histoire abrégée* of 1764 is not binominal and has been rejected for nomenclatorial purposes by the International Commission in *Opinion* 228 (1954, *Ops. Decls. int. Comm. zool. Nomencl.* 4 : 209-220). The next author to use the generic name *Binoculus* was Müller (O.F.) (1776) who placed in it *B. palustris* and *B. piscinus*. *Binoculus palustris* was a new name that Müller, without apparent reason, substituted for *Monoculus apus* Linnaeus. *B. piscinus* is a name for a parasitic Copepod. The oldest valid type selection for *Binoculus* Müller, as far as is known to us, is that by Fowler (1912), who selected *Binoculus palustris* Müller as the type species of that genus. Latreille (1810, *Consid. gén. Ordre nat. Crust. Arachn. Ins.* : 421), it is true, selected *Monoculus argulus* Fabricius, 1793, as the type species of *Binoculus*, but this selection is invalid as *M. argulus* was not included in the original description of *Binoculus* Müller.

6. In 1777 Scopoli erected a new genus *Apos*, in the original description of which he only cited one species, *Monoculus apus* Linnaeus, which is therefore the type species by monotypy.

7. The name *Apus* has been treated by some authors (e.g. Neave, 1939, *Nomencl. zool.* 1 : 268) as having been published as a generic name by Cuvier in [1797-1798] (*Tabl. élém. Hist. nat. Anim.* : 454, 700) but an inspection of this work shows that this claim is ill-founded. In the "Table des noms latins" Cuvier on page 700 entered the name *Apus* with a reference to page 454 in the body of the work. Reference to that page shows however that Cuvier there dealt with the present genus under the name "Les Monocles (*Monoculus*)". He divided this genus into several sections, the third of which he called "Les Apus". Neave and others who have accepted the generic name *Apus* from the above work were presumably misled into so doing by the fact that within the section "Les Apus" Cuvier entered one species as "l'*apus cancriforme* (*Monoculus apus* Lin.) *Limulus apus* Müller". For at first sight the term "*apus cancriforme*" (which was printed in italics) looks like a properly formed Latin binomen, apart from the fact that the word "*apus*" is printed with a small letter instead of with a capital. Closer inspection, however, shows clearly that Cuvier used the above term as a vernacular (French) word and that he regarded *Monoculus apus* Linnaeus (which, as shown above, he cited immediately after the term "*apus cancriforme*") as being the scientific name for this species. There is therefore nothing on page 454 of Cuvier's book which can be accepted as constituting the introduction of the generic name *Apus*. Accordingly,

the only possible ground on which it might have been claimed that he used the word "*Apus*" as a generic name in this book is his inclusion of this name in the "Table des noms latins" on page 700. But this claim is now excluded by the ruling given by the International Commission in its *Opinion* 374 (1955, *Ops. Decls. int. Comm. zool. Nomencl.* 11(14) : 369-378), where it ruled that the name *Antirhynchonella* published in 1871 in the index to Quenstedt's work *Die Brachiopoden* but without any corresponding use in the text did not thereby acquire the status of availability. The name *Apus* Cuvier [1797-1798] published on page 700 of the *Tableau élémentaire* must therefore be rejected as a *nomen nudum*.

8. The first author to use the name *Apus* as a generic name for Phyllopods was Cuvier (1800). The type species of this genus is *Monoculus apus* Linnaeus by absolute tautonymy.

9. Bosc [1801-1802] was the first author to recognise "A" and "B" as distinct species; he even (incorrectly) split "A" into two separate species, which he named *Apus cancriformis* and *A. viridis* respectively, while to species "B" the new name *Apus productus* was given. The name *Apus viridis* by subsequent authors practically always has been placed in the synonymy of *A. cancriformis* and is of no further importance here.

10. In 1803 Schrank introduced the generic name *Triops* (spelled correctly on pages 180 and xvii of his work but incorrectly as *Triopes* on page 251), in which he cited as the only species *Triops palustris*. *Binoculus palustris* Müller (O.F.), is thus the type of *Triops* by monotypy. *Triops* thereby becomes a junior objective synonym of *Binoculus* Müller (O.F.), of *Apos* Scopoli, and of *Apus* Cuvier.

11. Other objective synonyms of the names discussed above are the generic names *Apodium* Rafinesque, 1814, *Phyllopus* Rafinesque, 1815, and *Trinoculus* Voigt, 1836, all three being proposed as substitute names for either *Apus* or *Apos*. In addition, in 1820, Billberg introduced the name *Monops* with *Monoculus apus* Linnaeus as type species by monotypy, without however referring to any of the earlier generic names given to this species.

12. Leach (1814, *Edinburgh Ency.* 7 : 388) was the first author definitely to restrict the nominal species *Monoculus apus* Linnaeus, thereby removing its composite character and giving to it the interpretation which has been adopted by all subsequent workers. Five years later Leach (1819) was the first author also to consider species "A" and species "B" as belonging to different genera. For the genus containing species "A" he retained the name *Binoculus* and gave the name *Lepidurus* to the genus containing "B". In the remainder of the present section of this application these genera will be referred to as genus "X" and genus "Y" respectively. In the specific nomenclature Leach followed Bosc, referring to the two species as *Apus cancriformis* and *Apus productus* respectively.

13. Throughout practically the whole of the XIXth century the species "A" and "B" were indicated with the names *Apus cancriformis* and *Lepidurus* (or *Apus*) *productus*. At the end of that century, however, Hartert (1897, *Thierreich* 1 : 83) discovered that the oldest generic name for the Swift (Class Aves, Order Apodiformes) is *Apus* Scopoli, 1777, and he consequently introduced this name into ornithological nomenclature for the genus that until then was generally known as *Micropus* Wolf, 1810, or *Cypselus* Illiger, 1811. From various sides there was a strong opposition against this changing of names. For example, Bell (1900, *Ann. Mag. nat. Hist.* (7) 5 : 480) suggested that *Apus* Schaeffer, 1756, although a pre-Linnean name, should be adopted for the Phyllopod genus, while he furthermore was of the opinion that *Apos* Scopoli (1777 : 404) invalidated *Apus* Scopoli (1777 : 483). Stebbing (1910, *Ann. S. Afr. Mus.* 6 : 484) followed Bell's suggestion and adopted the name *Apus* Schaeffer, 1756, for the Crustacean ; he furthermore remarked that, if it were necessary to reject Schaeffer's name on nomenclatorial grounds, the name *Apos* Scopoli, 1777, could be used, leaving *Apus* Scopoli as a generic name for birds. Stebbing's nomenclature was adopted by several later authors such as Barnard (1929, *Ann. S. Afr. Mus.* 29 : 229) and Linder (1952, *Proc. U.S. nat. Mus.* 102 : 52), while Gurney (1923, *Ann. Mag. nat. Hist.* (9) 11 : 496, 497) continued to use the generic name *Apus* Latreille [1802-1803], deliberately neglecting the *Règles* by adopting what he called "the rules of common-sense". The foregoing zoologists employed the name *Apus cancriformis* for species "A" and the name *Lepidurus apus* or *L. productus* for species "B". Some carcinologists, however, abandoned the name *Apus* entirely. The first of these was Keilhack (1909, *Zool. Annalen* 3 : 177) who furthermore argued that the name *Apos* Scopoli, 1777, could not be used for any genus of Notostracan Phyllopods (a group to which both species "A" and "B" belong) as was suggested by Bell and Stebbing, since Scopoli's diagnosis does not fit any such genus, but evidently was meant for the genus of Anostracan Phyllopods now known as *Branchipus* Schaeffer, 1766. Keilhack, however, was wrong here. Though Scopoli's short description of *Apos* may not entirely fit the Notostracan genera, the fact that the only nominal species included in the original description of it is *Monoculus apus* Linnaeus, makes that species automatically the type species of Scopoli's genus. Most subsequent authors accepted Keilhack's point of view as correct and, to our knowledge, the generic name *Apos* Scopoli has not been adopted by any later zoologist. Keilhack suggested that the generic name *Triops* Schrank should be used to replace *Apus* Cuvier and in this respect he has been followed by several other authors. These authors use the name *Triops cancriformis* for species "A" and *Lepidurus productus* or *L. apus* for species "B". The situation at present is thus such that the generic name *Lepidurus* Leach is adopted by practically all carcinologists to indicate genus "Y", while for the other genus either the name *Apus* Schaeffer (or *Apus* Cuvier), or *Triops* Schrank is employed. Most authors have the same opinion about the size of these genera, only the Italian author Ghigi (1921, *Atti Soc. ital. Sci. nat.* 60 : 160-188) divided "X" in two distinct genera which he called *Thriops* (an erroneous spelling of *Triops*) Schrank (containing species "A"), and *Proterothriops* (a new genus).

14. To solve the very intricate problem placed before us we first have to ascertain to which species must be applied the specific name *apus* Linnaeus, 1758, as published in the combination *Monoculus apus*. As pointed out above, Bosc [1801-1802] was the first author to split *Monoculus apus* Linnaeus. Under his *Apus cancriformis*, Bosc referred to Schaeffer's first two plates and to "*Monoculus apus* . Fab.", while under *A. productus* he only referred to Schaeffer's pl. 6 (under *A. viridis* a reference to Schaeffer's pl. 5 was given). This seems to indicate that Bosc himself thought of *A. cancriformis* as the typical *Monoculus apus*. Leach (1819) on the other hand made it clear that he considered *Lepidurus productus* as a synonym of the typical *Monoculus apus*. Leach's point of view has been adopted by most subsequent authors, the species *Lepidurus productus* (Bosc) often being given the name *Lepidurus apus* (Linnaeus). So far as we know no lectotype has ever been selected for *Monoculus apus* Linnaeus and the identity of that nominal species consequently is not yet definitively established. In order to remedy this undesirable situation the senior author (Holthuis) selects here, in agreement with current usage, as the lectotype of *Monoculus apus* Linnaeus, 1758 (*Syst. Nat.* (ed. 10) 1 : 635) the specimen figured as Figure III on plate VI of Schaeffer's (1756) "Der Krebsartige Kiefenfuss". This selection now definitively links the specific name *apus* Linnaeus, 1758, to species "B". At the same time Holthuis selects as the lectotype of *Apus productus* Bosc [1801-1802] (*Hist. nat. Crust.* 2 : 244) the same specimen, namely that figured on pl. VI, fig. III, of Schaeffer's "Der Krebsartige Kiefenfuss". *Monoculus apus* Linnaeus and *Apus productus* Bosc thereby now have become objective synonyms of one another. Further, as the lectotype of *Apus cancriformis* Bosc, [1801-1802] (*Hist. nat. Crust.* 2 : 244) Holthuis selects the specimen figured as Figure IV on plate I of Schaeffer's "Der Krebsartige Kiefenfuss". By these selections the identity of the above nominal species is now definitively determined.

15. Bosc [1801-1802] is cited by practically all zoologists as the original author of the name *Apus cancriformis*. Even Sherborn (1924, *Index Anim.*, Pars secund. (5) : 1035) considered this to be a new name of Bosc's. There is, however, an earlier use of the specific name *cancriformis* for one of the two species dealt with here. That name is *Limulus cancriformis* Lamarck, 1801 (*Syst. Anim. sans Vertèbr.* : 169). Since Bosc ([1801-1802] *Hist. nat. Crust.* 2 : 243) refers to Lamarck's *Syst. Anim. sans Vertèbr.*, the latter book must have been published before the former, so that the specific name *cancriformis* Lamarck is older than *cancriformis* Bosc. Since Lamarck's name is given as a substitute name for *Monoculus apus* Linnaeus, it is identical with *Apus productus* Bosc and specifically distinct from *Apus cancriformis* Bosc. As Bosc in his synonymy of *Apus cancriformis* does not cite *Limulus cancriformis* Lamarck, we may conclude, as have most authors, that Bosc's name is a new name and not merely a new combination formed with the specific name *cancriformis* proposed by Lamarck. This is rendered the more probable by the fact that there is an exactly similar case in regard to the specific name *productus*. One of the three species placed in the genus *Limulus* by Lamarck (1801, *Syst. Anim.*

sans Vertèbr. : 169) is *Limulus productus*, which is a new combination formed with the specific name *productus* as originally proposed by Müller (O.F.) (1785, *Entomotr.* : 132) in the combination *Caligus productus*. This species belongs to the parasitic Copepoda and at present is known under the name *Dinematura producta* (O. F. Müller). It is of course entirely different from the phyllopod species which Bosc ([1801–1802] *Hist. nat. Crust.* 2 : 244) named *Apus productus*. Since it is perfectly obvious to anyone that *Apus productus* Bosc [1801–1802] is a new name and not a new combination of *Limulus productus* Lamarck, 1801, we are, I believe, justified in considering the name *Apus cancriformis* Bosc [1801–1802] also as a new name and not as a new combination of *Limulus cancriformis* Lamarck, 1801. *Limulus cancriformis* Lamarck and *Apus cancriformis* Bosc are at present placed in different genera and therefore are not homonyms of one another, so that the existence of Lamarck's specific name *cancriformis* does not endanger that of the specific name *cancriformis* Bosc. It is requested here that the name *cancriformis* Lamarck, 1801, as published in the combination *Limulus cancriformis*, be placed on the *Official Index of Rejected and Invalid Specific Names in Zoology*, since it is a junior objective synonym of the name *apus* Linnaeus, 1758, as published in the combination *Monoculus apus*.

16. We may now direct our attention to the generic names for species "A" and "B". It is clear that *Apus* Schaeffer, 1756, being a pre-Linnean name, cannot be used unless validated under the Plenary Powers. *Binoculus* Geoffroy likewise is an unavailable name as it was published in a non-binominal book which has been rejected by the International Commission on Zoological Nomenclature. *Apus* Cuvier [1797–1798] is a *nomen nudum*, and *Apus* Cuvier, 1800, is a junior homonym of *Apus* Scopoli, 1777; the two former names thus are also unavailable. The generic names *Binoculus* Müller (O.F.), 1776, *Apos* Scopoli, 1777, *Triops* Schrank, 1803, *Apodium* Rafinesque, 1814, *Phyllopus* Rafinesque, 1815, *Lepidurus* Leach, 1819, *Monops* Billberg, 1820, and *Trinoculus* Voigt, 1836, all have as their type species either *Monoculus apus* Linnaeus, 1758, or a species that is objectively identical with it. Therefore the foregoing generic names are objective synonyms of each other. The oldest of these names, *Binoculus* Müller (O.F.), 1776, consequently is the only available name and if the normal rules were to be applied, that name should be used for genus "Y". The oldest available name for genus "X", as far as is known to us, is *Proterothriops* Ghigi, 1921. Neither *Binoculus* nor *Proterothriops* have been much used by carcinologists and their reintroduction for genera "Y" and "X" respectively would cause a great deal of confusion in the nomenclature of the Phyllopoda.

17. For genus "X" the generic names *Apus* Schaeffer, or *Triops* Schrank have been regularly employed; *Proterothriops*, the nomenclatorially correct name, has been used by a few authors, who employed it for part of the genus only. Many carcinologists would advocate the validation of the name *Apus* Schaeffer, 1756, under the Plenary Powers, since this name is used in many

important publications on Phyllopods, several of which being of quite recent date. Apart from the serious difficulties which would be involved in a proposal for the validation of a pre-Linnean name, the above solution would have been acceptable, had it not been that since Hartert's (1897) rediscovery of the name *Apus* Scopoli, 1777, that name has become firmly established in ornithological nomenclature. In modern handbooks and check-lists, such as Peters's (1940 *Check-List of Birds of the World* 4 : 244) this name has been generally adopted. To change the generic name of the Swift back to *Micropus* Wolf, 1810, or *Cypselus* Illiger, 1811, would seriously disturb ornithological nomenclature. This consideration alone is, we consider, sufficient to rule out the possibility of using the Plenary Powers to validate *Apus* as a name for Crustacea.

18. Schrank (1803) in the description of the type species of his genus referred to Schaeffer's (1756) plates 1-4 and not to the other plates published by that author. This makes it probable that Schrank's specimens actually belonged to species "A", since that is the only species figured on those plates, species "B" being shown on Schaeffer's pl. 6 only. Schrank therefore incorrectly applied the specific name *palustris* Müller (O.F.) (which is objectively synonymous with *apus* Linnaeus and thus belongs to species "B") to his specimens. *Triops* Schrank, 1803, therefore may be considered as a genus based upon a misidentified type species. This is, in our opinion, a clear case where it would be appropriate in the interests of nomenclatorial stability that the Commission should make use of the provision inserted in the *Règles* by the Thirteenth International Congress of Zoology, Paris, 1948, for dealing with the names of genera based upon misidentified type species (1950, *Bull. zool. Nomencl.* 4 : 158-159) and therefore under that procedure designate species "A" to be the type species of *Triops* Schrank in place of species "B". The name *Triops* would thereupon become available for use in the sense adopted by Keilhack and other authors. Since it is not practicable to validate *Apus* Schaeffer, 1756, the validation of the name *Triops* Schrank in the above sense is the best solution.

19. Practically all modern carcinologists use the generic name *Lepidurus* Leach, 1819, to indicate genus "Y". However, as has been pointed out above, there are at least four senior generic names that are objective synonyms of *Lepidurus*, which thus is unavailable nomenclatorially, *Binoculus* Müller being the correct name for the genus. Since, however, the name *Lepidurus* is so generally used at present, while *Binoculus* is highly unfamiliar to zoologists, the use of the Plenary Powers for the validation of the former name seems to be entirely justified. By this action a further confusion and instability in the nomenclature of the Phyllopoda will be prevented.

20. At this point it is necessary to draw attention to one further problem on which action under the Plenary Powers will be necessary as part of any general settlement of outstanding problems in connection with this case. This

is concerned with the question of the gender to be assigned to the generic name *Triops* Schrank, 1803. This name has invariably been treated as being masculine and the abandonment of this practice would lead to serious confusion and inconvenience without securing any benefit whatsoever. Unfortunately, however, under a decision taken by the Copenhagen Congress (1953, *Copenhagen Decisions zool. Nomencl.* : 50, Decision 84(7)(b)(iii)) generic names having the termination "-ops" are to be treated as being feminine in gender. In the case of the Decapod Crustacea the general practice has been to treat generic names having this termination as being masculine in gender and we consider that this practice should be validated and we have in mind to submit a proposal to the Commission in this sense. It would clearly be most undesirable that the settlement of the *Apus* problem should be postponed until after this general problem has been submitted to, and settled by, the Commission, for this would inevitably involve a considerable delay. On the other hand, a decision on the particular case of the gender of the generic name *Triops* must be taken as part of the decision on the present case, for the gender to be attributed to that name must be noted in the entry relating to the name *Triops* when that generic name is inscribed on the *Official List*. We accordingly recommend that, as has been proposed in relation to the generic name *Nephrops* [Leach], [1814], where an exactly similar problem arises (1955, *Bull. zool. Nomencl.* 11 : 260-262), the name *Triops* Schrank should be treated as a separate case and that the Commission acting under its Plenary Powers should direct that this generic name be treated as being masculine in gender.

Ornithological genera concerned

21. The following are the references for the names of the ornithological genera involved in the present case :—

Apus Scopoli, 1777, *Introd. Hist. nat.* : 483 (gender : masculine) (type species, by monotypy : *Hirundo apus* Linnaeus, 1758, *Syst. Nat.* (ed. 10) 1 : 192)

Micropus Wolf, 1810, in Meyer & Wolf, *Taschenb. deuts. Vögelk.* 1 : 280 (type species, by selection by Salvadori (1880, *Mem. R. Accad. Sci. Torino* (2) 33 : 534) : *Hirundo apus* Linnaeus, 1758)

Cypselus Illiger, 1811, *Prodr. Syst. Mamm. Av.* : 229 (a substitute name for *Apus* Scopoli, 1777)

Brachypus Meyer, 1814, *Ann. Wetterau. Ges.* 3 : 333 (a substitute name for *Micropus* Wolf, 1810)

Brevipes [Palmer], 1836, *Analyst* 4 : 101 (a substitute name for *Brachypus* Meyer, 1814).

22. The generic name *Apus* Scopoli, 1777, is an available name and is the oldest such name for the Swift. It should therefore now be placed on the *Official List of Generic Names in Zoology*, the name of its type species, *apus*

Linnaeus, 1758, as published in the combination *Hirundo apus*, being placed at the same time on the *Official List of Specific Names in Zoology*. The four other generic names specified in paragraph 8 above are, as is there shown, all junior objective synonyms of *Apus* Scopoli, 1777, and should therefore be placed on the *Official Index of Rejected and Invalid Generic Names in Zoology*.

23. The following names are all junior homonyms either of *Brachypus* Meyer, 1814, or of *Micropus* Wolf, 1810, and should therefore be placed on the *Official Index of Rejected and Invalid Generic Names in Zoology* :—

Brachypus Swainson, 1824, *Zool. J.* 1(3) : 305

Brachypus Meigen, 1824, *Syst. Besch. europ. zweifl. Ins.* 4 : 34

Brachypus Gray (J.E.), 1825, *Ann. Phil.* (2) 10 : 338

Brachypus Schoenherr, 1826, *Curculionid. Disp. meth.* : 217

Brachypus Fitzinger, 1826, *Neue Classif. Rept.* : 20, 50

Brachypus Guilding, 1828, *Zool. J.* 4(14) : 167

Micropus Hübner, 1818, *Zutr. z. Samml. exot. Schmett.* 1 : 24

Micropus Gray (J.E.), 1831, *Zool. Miscell.* (1) : 20

Micropus Swainson, [1832], in Richardson, *Faun. bor.-amer.* 2 : 486

Micropus Spinola, 1837, *Essai Genr. Ins. Hémipt.* : 218

Micropus Denny, 1842, *Monogr. Anoplurorum Brit.* : 247

Micropus Kner, 1868, *Sitzber. Akad. Wiss. Wien, Math.-Naturw. Kl.* 58(1) : 29, 322

Family-Group-Name Problems

24. The family-group-name problems involved in the present case are complicated by reason partly of the unfortunate decision of the Copenhagen (1953) Congress to keep alive family-group names based upon generic names which are junior objective synonyms, or junior subjective synonyms, of generic names of older date, and partly of the fact that the Crustacean and ornithological aspects of the problem involved are brought into direct relation with one another through the existence of homonymous family names. In the imme-

diately following paragraphs particulars are given, first, of the family-group names which have been published for the family of Crustacea with which we are directly concerned and, second, of the family-group names which have been given to the family of birds containing the Swift. Next, the problems arising in each case are discussed in isolation. Finally, the relation of these names to one another is considered in the light of the unfortunate situation of homonymy which has arisen through the establishment of identical family-group names on the basis on the one hand of the avian genus *Apus* Scopoli, 1777, and on the other hand of the Crustacean genus *Apus* Cuvier. We are indebted to the senior author's colleague Dr. G. C. A. Junge for assistance and advice as regards the avian names involved.

25. The following family-group names have been published for the family of Crustacea containing the genera styled in the present paper as Genus "X" and Genus "Y":—

PHILLOPIA (an Invalid Original Spelling for PHYLLOPODIDAE) Rafinesque, 1815, *Analyse Nature* : 99 (type genus : *Phyllopus* Rafinesque, 1815, *Analyse Nature* : 99)

APODES (an Invalid Original Spelling for APODIDAE) Billberg, 1820, *Enum. Ins. Mus. Billberg.* : 132 (type genus : *Monops* Billberg, 1820)

APUSIENS Milne Edwards (H.), 1840, *Hist. nat. Crust.* 3 : 353 (invalid because a vernacular (French) word and not a Latinised word)

APIDAE (an Invalid Original Spelling for APODIDAE) Burmeister, 1843, *Organisation Trilobiten* : table opposite page 38 (type genus : *Apus* Cuvier, 1800)

APODIDAE Agassiz (J.L.R.), 1846, *Nomencl. zool.*, Index univ. : 30 (a correction of APIDAE Burmeister, 1843)

TRIOPSIDAE Keilhack, 1909, Brauer's *Süsswasserf. Deutschl.* 10 : 7 (type genus : *Triops* Schrank, 1803)

BINOCULIDAE Fowler, 1912, *Ann. Rep. New Jersey State Mus.* 1911 : 466 (type genus : *Binoculus* Müller (O.F.), 1776)

26. The following family-group names have been published for the family of birds containing the genus *Apus* Scopoli, 1777 :—

CYPSELINAE Bonaparte, 1838, *Geogr. comp. List Birds Europe N. Amer.* : 8 (type genus : *Cypselus* Illiger, 1811, a junior objective synonym of *Apus* Scopoli, 1777)

MICROPODIDAE Stejneger, 1885, *Standard nat. Hist.* 4 : 437 (type genus : *Micropus* Wolf, 1810, a junior objective synonym of *Apus* Scopoli, 1777)

APODIDAE Reichenow, 1897, *Ornith. Monatsber.* 5 : 10 (type genus : *Apus* Scopoli, 1777) (invalid because published for some purpose other than for use in zoological nomenclature)

APODINAE Hartert, 1897, *Das Tierreich* 1 : 80 (type genus : *Apus* Scopoli, 1777) (known to have been published later than APODIDAE Reichenow because Hartert cited a reference to Reichenow's paper)

27. Of the four family-group names based on different generic names which have been given to the family of Crustacea with which we are here concerned one name, APODIDAE published as APIDAE by Burmeister in 1843, is already invalid under a decision taken by the Fourteenth International Congress of Zoology, Copenhagen, 1953 (1953, *Copenhagen Decisions zool. Nomencl.* : 36, Decision 54(1)(b)), for it is based upon the name of a genus (*Apus* Cuvier, 1800) which is a homonym of a previously published name (*Apus* Scopoli, 1777). In addition, there is, it should be noted, another name APODIDAE (correction of APODES) Billberg, 1820, which is also invalid, having been based by Billberg not upon the name (*Monops* Billberg) used by him for the type genus but upon the specific name (*apus* Linnaeus, 1758, as published in the combination *Monoculus apus*) of the type species of the type genus, an error which gives to the family-group name so published the misleading appearance of having been based—as, in fact, Burmeister's later name APIDAE was based—upon the generic name *Apus* Cuvier, 1800. Two of the remaining names will also be invalid if the Commission accepts the proposals at the generic-name level submitted in the present application. For, if the International Commission suppresses the generic names *Binoculus* Müller (O.F.), 1776, and *Phyllopus* Rafinesque, 1815, under its Plenary Powers, the family-group names based on those generic names (BINOCULIDAE Fowler, 1912, and PHYLOPODIDAE (correction of PHYLOPIA) Rafinesque, 1815) will both thereby also be automatically suppressed under the Ruling given by the Commission in *Declaration* 20 (1955, *Ops. Decls. int. Comm. zool. Nomencl.* 10(19) : i-viii). The avoidance of the need for using the name PHYLOPODIDAE is particularly satisfactory, for, so far as we know, no one apart from Rafinesque has ever employed this name, the re-introduction of which after so long an interval would be bound to give rise to confusion. The rejection of the name BINOCULIDAE is also much to be welcomed, for this name has hardly, if at all, been used in carcinological literature. The rejection of the names discussed above will leave the well-established name TRIOPSIDAE Keilhack, 1909, based on *Triops* Schrank, 1803, the oldest available, and indeed the only available, name for this family of Crustacea.

28. The three family-group names in the Class Aves which are involved in the present case are all objective synonyms of one another, the type genus of each having the Swift, *Hirundo apus* Linnaeus, 1758, as its type species. Of these names, the first, CYPSELINAE (type genus : *Cypselus* Illiger, 1811) was published by Bonaparte in 1838 and the second, MICROPODIDAE (type genus : *Micropus* Wolf, 1810) by Stejneger in 1885. The third, based upon the generic name *Apus* Scopoli, 1777, was first published in 1897, in which year it was published independently by two different authors, namely as APODIDAE by Reichenow and as APODINAE by Hartert. Reichenow's name was the first to be published, as is shown by the fact that in Hartert's paper there is a direct reference to that by Reichenow. We must note here, however, that, although Reichenow published the name APODIDAE, he made it clear that he himself

rejected this name and considered that it ought not to be used in zoological nomenclature, writing of it as follows :—" Da die Anwendung von Apodidae sich nicht empfehlen dürfte". Accordingly, under a decision taken by the Copenhagen Congress that a name is not to be treated as having acquired the status of availability if its author makes it clear that it is published by him for some purpose other than for use in zoological nomenclature (1953, *Copenhagen Decisions zool. Nomencl.* : 63, Decision 114) the name APODIDAE did not acquire the status of availability through being published by Reichenow in the manner described above. The family-group name based on the generic name *Apus* Scopoli, 1777, is therefore to be attributed to Hartert by whom it was published in conditions which satisfied the requirements of the *Règles*. We see therefore that the position as regards the three family names discussed above is that the name (APODIDAE) based on the valid name of the type genus (*Apus* Scopoli) is of later date than either of the other two names (CYPSELINAE ; MICROPODIDAE). Up to 1953, however, it would still have been the valid name for this family of birds. However, under a decision taken by the Copenhagen Congress in that year (1953, *Copenhagen Decisions zool. Nomencl.* : 36, Decision 54(1)(a)) a family-group name based upon a generic name which (as here) is a junior objective synonym of another generic name is nevertheless to be retained. Accordingly, in the absence of remedial action by the Commission the valid name for this family is CYPSELIDAE.

29. Having examined separately the family-group-name problems which arise in connection with the names to be used for the families of Crustacea and birds involved in the present case, we must now consider the position of the names for these families in relation to the name APODIDAE which has been bestowed upon both. In the case of the family of Crustacea we have seen that the name APODIDAE which is based upon the invalid name *Apus* Cuvier was formerly widely used by carcinologists. During the last forty-five years, however, it has been largely replaced by the name TRIOPSIDAE following the initiative of Keilhack and later authors. In the case of the family of birds an exactly opposite movement has been in progress, for, whereas formerly the names CYPSELIDAE and MICROPODIDAE were both widely used, the name APODIDAE has been making steady progress and is now used by the majority of authors. This name, for example, is used in Peters's *Check-List of Birds of the World*, in the *Handbook of British Birds* and in Roger Tory Peterson's *Field Guide to the Birds of Britain and Europe* and the same author's *Field Guide to the Birds Found East of the Rockies*. It is moreover the name which is accepted in the Check-List prepared by the British Ornithologists' Union. At this stage it would clearly be a retrograde step from the point of view of nomenclatorial stability to abandon the name APODIDAE in favour of either CYPSELIDAE or MICROPODIDAE. Prior to the Copenhagen Congress of 1953 the *Règles* contained no provision regulating the action to be taken in cases where a state of homonymy arose at the family-name level as the result of such names being formed in different groups from generic names which were themselves homonyms of one another, being words having the same stem (*thème*). This matter was

considered by the Copenhagen Congress of 1953 which inserted in the *Règles* a provision that, where two family-group names were found to be homonyms of one another by reason of being based upon generic names which possess the same stem but are not themselves homonyms of one another, the case is to be referred to the International Commission for decision. The Congress further directed that the Commission was to make a spelling change in one of the names sufficient to bring the condition of homonymy to an end. The decision so taken covers the case where each of two similar but valid generic names (such as *Cyprina* and *Cyprinus*) is taken as the base for a family-group name with the result that the two names so formed consist of the same word (in the case cited above, the word CYPRINIDAE). The foregoing decision gives no guidance however as to the action which should be taken where as in the present case a family name in current use, such as the name APODIDAE in birds, is a junior homonym of a family name in some other group, which is invalid by reason of the fact that the name of its type genus (in the case of the family APODIDAE in Crustacea, the name *Apus* Cuvier, 1800) is itself a junior homonym of the name of the type genus (in the case of the family APODIDAE in Aves, the name *Apus* Scopoli, 1777) of the other family. The omission of the Copenhagen Congress to deal with this class of case was no doubt accidental and it is reasonable to infer that in such a case the correct course is to refer the matter to the Commission for decision.

30. In the present case the position as regards the family of Crustacea concerned is that the name APODIDAE is invalid because (as we have seen in paragraph 27 above) it is based upon a generic name which itself is a junior homonym of another generic name. For this reason and because of the confusion which would arise owing to the wide usage of the name APODIDAE in ornithology, there would clearly be no justification for the re-introduction of this name in carcinology, where moreover the name TRIOPSIDAE must now be regarded as being firmly entrenched. In the case of the family of birds the name APODIDAE is based upon the valid name of the type genus of the family and is currently the name most commonly used for that family. Further, apart from the doubts as to the treatment to be accorded to homonymous family-group names which then existed, the name APODIDAE, as being the name based upon the valid name of its type genus, was the valid name for this family up to the time when in 1953 the rules were changed by the Copenhagen Congress. Accordingly, it may be concluded that the interests of nomenclatorial stability in the two groups concerned will be best served by a settlement under which (a) the name TRIOPSIDAE is confirmed as the name for the family of Crustacea formerly known as APODIDAE and (b) the name APODIDAE is accepted as the family name for the family of birds formerly known either as CYPSELIDAE or as MICROPODIDAE. A solution on these lines is accordingly recommended. This solution will involve the suppression by the Commission under its Plenary Powers of the names CYPSELINAE Bonaparte, 1838, and MICROPODIDAE Stejneger, 1885, both of which have priority over APODIDAE Hartert, 1897.

Recommendations

31. In the light of the considerations set forth in the present application the International Commission is asked to take the following action for the purpose of restoring order and preventing further confusion in the nomenclature of the groups concerned, namely that it should :—

(1) use its Plenary Powers :—

(a) to suppress for the purposes of the Law of Priority but not for those of the Law of Homonymy the under-mentioned names of genera, each of which has as its type species either *Monoculus apus* Linnaeus, 1758, or the objectively identical nominal species *Binoculus palustris* Müller (O.F.), 1776 :—

(i) *Binoculus* Müller (O.F.), 1776 ;

(ii) *Apos* Scopoli, 1777 ;

(iii) *Apodium* Rafinesque, 1814 ;

(iv) *Phyllopus* Rafinesque, 1815 ;

(b) to suppress for the purposes of the Law of Priority but not for those of the Law of Homonymy the under-mentioned names of family-group taxa in the Class Aves :—

(i) CYPSELIDAE Bonaparte, 1838 ;

(ii) MICROPODIDAE Stejneger, 1885 ;

(c) under the procedure prescribed by the Thirteenth International Congress of Zoology, Paris, 1948, for determining the type species of a genus based upon a misidentified type species, to set aside all type designations or selections for the genus *Triops* Schrank, 1803, made prior to the Ruling now asked for and, having done so, to designate *Apus cancriformis* Bose, [1801–1802], to be the type species of the foregoing genus ;

(d) to direct that the gender to be attributed to the generic name *Triops* Schrank, 1803, shall in accordance with established practice be the masculine gender ;

(2) take note that under the Ruling given in *Declaration* 20 the under-mentioned family-group names will automatically be suppressed for the purposes of the Law of Priority but not for those of the Law of Homonymy in the event of the suppression under the Plenary Powers of the names of the type genera of the taxa respectively concerned as recommended in (1)(a) above :—

(a) BINOCULIDAE Fowler, 1912 (type genus : *Binoculus* Müller (O.F.), 1776) ;

(b) PHILLOPIA (Invalid Original Spelling for PHYLLOPODIDAE) Rafinesque, 1815 (type genus : *Phyllopus* Rafinesque, 1815) ;

(3) place the under-mentioned generic names on the *Official List of Generic Names in Zoology* :—

- (a) *Lepidurus* Leach, 1819 (gender : masculine) (type species, by monotypy : *Monoculus apus* Linnaeus, 1758, as defined by the lectotype selected by Holthuis in the present application) (Class Crustacea) ;
- (b) *Triops* Schrank, 1803 (gender : masculine, as determined under the Plenary Powers under (1)(d) above) (type species, by designation under the Plenary Powers under (1)(c) above : *Apus cancriformis* Bosc, [1801–1802] (Class Crustacea) ;
- (c) *Apus* Scopoli, 1777 (gender : masculine) (type species, by monotypy : *Hirundo apus* Linnaeus, 1758) (Class Aves) ;

(4) place the under-mentioned specific names on the *Official List of Specific Names in Zoology* :—

- (a) *apus* Linnaeus, 1758, as published in the combination *Monoculus apus*, as defined by the lectotype selected by Holthuis in the present application (specific name of type species of *Lepidurus* Leach, 1819) (Class Crustacea) ;
- (b) *cancriformis* Bosc, [1801–1802], as published in the combination *Apus cancriformis* (specific name of type species of *Triops* Schrank, 1803) (Class Crustacea) ;
- (c) *apus* Linnaeus, 1758, as published in the combination *Hirundo apus* (specific name of type species of *Apus* Scopoli, 1777 (Class Aves) ;

(5) place the under-mentioned generic names on the *Official Index of Rejected and Invalid Generic Names in Zoology* :—

- (a) *Apodium* Rafinesque, 1814, as suppressed under the Plenary Powers under (1)(a)(iii) above ;
- (b) *Apos* Scopoli, 1777, as suppressed under the Plenary Powers under (1)(a)(ii) above ;
- (c) *Apus* Schaeffer, 1756 (invalid because published before the starting point of zoological nomenclature) ;
- (d) *Apus* Cuvier, 1800 (a junior homonym of *Apus* Scopoli, 1777) ;
- (e) *Apus* Latreille, [1802–1803] (a junior homonym of *Apus* Scopoli, 1777) ;
- (f) *Apus* Schoch, 1868 (a junior homonym of *Apus* Scopoli, 1777) ;

- (g) *Binoculus* Geoffroy, 1764 (a name published in a work rejected for nomenclatorial purposes);
- (h) *Binoculus* Müller (O.F.), 1776, as suppressed under the Plenary Powers under (1)(a)(i) above;
- (i) *Brachypus* Meyer, 1814 (a junior objective synonym of *Apus* Scopoli, 1777);
- (j) The under-mentioned names, each of which is a junior homonym of *Brachypus* Meyer, 1814:—
 - (i) *Brachypus* Swainson, 1824;
 - (ii) *Brachypus* Meigen, 1824;
 - (iii) *Brachypus* Gray (J.E.), 1825;
 - (iv) *Brachypus* Schoenherr, 1826;
 - (v) *Brachypus* Fitzinger, 1826;
 - (vi) *Brachypus* Guilding, 1828;
- (k) *Brevipes* Palmer, [1836] (a junior objective synonym of *Apus* Scopoli, 1777);
- (l) *Cypselus* Illiger, 1811 (a junior objective synonym of *Apus* Scopoli, 1777);
- (m) *Micropus* Wolf, 1810 (a junior objective synonym of *Apus* Scopoli, 1777);
- (n) The under-mentioned names, each of which is a junior homonym of *Micropus* Wolf, 1810:—
 - (i) *Micropus* Hübner, 1818;
 - (ii) *Micropus* Gray (J.E.), 1831;
 - (iii) *Micropus* Swainson, [1832];
 - (iv) *Micropus* Spinola, 1837;
 - (v) *Micropus* Denny, 1842;
 - (vi) *Micropus* Kner, 1868;
- (o) *Monops* Billberg, 1820 (a junior objective synonym of *Lepidurus* Leach, 1819);
- (p) *Phyllopus* Rafinesque, 1815, as suppressed under the Plenary Powers under (1)(a)(iv) above;
- (q) *Thriops* Ghigi, 1921 (an Erroneous Subsequent Spelling for *Triops* Schrank, 1803);
- (r) *Trinoculus* Voigt, 1836 (a junior objective synonym of *Lepidurus* Leach, 1819);

- (s) *Triopes* Schrank, 1803 (an Invalid Original Spelling for *Triops* Schrank, 1803);
- (6) place the under-mentioned specific names on the *Official Index of Rejected and Invalid Specific Names in Zoology* :—
- (a) *palustris* Müller (O.F.), 1776, as published in the combination *Binoculus palustris* (a junior objective synonym of *apus* Linnaeus, 1758, as published in the combination *Monoculus apus*);
 - (b) *cancriformis* Lamarck, 1801, as published in the combination *Limulus cancriformis* (a junior objective synonym of *apus* Linnaeus, 1758, as published in the combination *Monoculus apus*);
 - (c) *productus* Bosc, [1801–1802], as published in the combination *Apus productus* (a junior objective synonym of *apus* Linnaeus, 1758, as published in the combination *Monoculus apus*);
- (7) place the under-mentioned names on the *Official List of Family-Group Names in Zoology* :—
- (a) TRIOPSIDAE Keilhack, 1909 (type genus : *Triops* Schrank, 1803, with the type species designated under the above Powers under (1)(c) above) (Class Crustacea);
 - (b) APODINAE Hartert, 1897 (type genus *Apus* Scopoli, 1777) (Class Aves);
- (8) place the under-mentioned family-group names on the *Official Index of Rejected and Invalid Family-Group Names in Zoology* :—
- (a) APIDAE Burmeister, 1843 (type genus : *Apus* Cuvier, 1800) (an Invalid Original Spelling for APODIDAE) (invalid because based upon a generic name rejected as a junior homonym of an earlier name, namely *Apus* Scopoli, 1777) (Class Crustacea);
 - (b) APODES Billberg, 1820 (type genus : *Monops* Billberg, 1820) (an Invalid Original Spelling for APODIDAE) (invalid because based not upon the name of the type genus (*Monops*) but upon the specific name (*apus* Linnaeus, 1758, as published in the combination *Monoculus apus*) of the type species of the type genus);
 - (c) APODIDAE Agassiz (J.L.R.), 1846 (type genus : *Apus* Cuvier, 1800) (a correction of the Invalid Original Spelling APIDAE Burmeister, 1843) (invalid because based upon a generic name rejected as a junior homonym of an earlier name, namely *Apus* Scopoli, 1777) (Class Crustacea);

- (d) *APODIDAE* Reichenow, 1897 (type genus : *Apus* Scopoli, 1777) (invalid because published for some purpose other than for use in zoological nomenclature) (Class Aves) ;
- (e) *APUSIENS* Milne Edwards (H.), 1840 (type genus : *Apus* Cuvier, 1800) (invalid because a vernacular (French) word and not a Latinised word) (Class Crustacea) ;
- (f) *BINOCULIDAE* Fowler, 1912 (type genus : *Binoculus* Müller (O.F.), 1776) (suppressed under the Plenary Powers automatically through the suppression under those Powers of the name of its type genus) (Class Crustacea) ;
- (g) *CYPSELINAE* Bonaparte, 1838, as suppressed under the Plenary Powers under (1)(b) above (type genus : *Apus* Scopoli, 1777) (Class Aves) ;
- (h) *MICROPODIDAE* Stejneger, 1885, as suppressed under the Plenary Powers under (1)(b) above (type genus *Micropus* Wolf, 1810) (Class Aves) ;
- (i) *PHILLOPIA* Rafinesque, 1815 (type genus : *Phyllopus* Rafinesque, 1815) (an Invalid Original Spelling for *PHYLOPODIDAE*) (Class Crustacea).

**SUPPORT FOR DR. JAANUSSON'S APPLICATION REGARDING THE
GENERIC NAME "ASAPHUS" BRONGNIART, 1822 (CLASS TRILOBITA)**

By **C. J. STUBBLEFIELD**

(Geological Survey and Museum, Exhibition Road, London, S.W.7)

(Commission Reference : **Z.N.(S.) 636**)

(For the proposal submitted see 1955, *Bull. zool. Nomencl.* **12** : 90-96)

(Letter dated 2nd February 1956)

I support the application by Dr. V. Jaanusson for the suppression of *Asaphus* Brongniart, 1817, and for the acceptance of *Asaphus* Brongniart, 1822, with *Entomostracites expansus* Wahlenberg, 1821, as its type species, since I regard this as being in the best interests of stability in nomenclature of the Trilobita.

PROPOSED DETERMINATION UNDER THE PLENARY POWERS,
OF THE AUTHORSHIP OF, AND OF THE ORIGINAL REFERENCE
FOR, THE NAME "FILARIA VOLVULUS" (CLASS NEMATODA)
AND PROPOSED VALIDATION UNDER THE SAME POWERS OF
THE EMENDATION FROM "VOLVULAS" TO "VOLVULUS" OF
THE SPECIFIC NAME OF THIS SPECIES

By HERBERT T. DALMAT

(Laboratory of Tropical Diseases, National Microbiological Institute,
Bethesda, Maryland, U.S.A.)

(Commission Reference : Z.N.(S.) 877)

I wish to present for the decision of the International Commission on Zoological Nomenclature the following case concerning the name "*Onchocerca volvulus* (Leuckart, 1893) Railliet and Henry, 1910".

2. In the course of preparing a manuscript relative to human onchocerciasis, I was unable to find Leuckart's original description of the filarid worm causing the disease. Most texts and research papers list the species as given in the above title, neglecting to give the source in the respective bibliography. Thus, in the Appendix (: 313) of the "Bibliography of Onchocerciasis", (*Publication No. 242 of the Pan-American Sanitary Bureau*) published in March, 1950, a reference is given for Leuckart, stating that he is quoted by Manson in an article "Skin Diseases" in Davidson's *Textbook of Hygiene and Diseases of Warm Climates* (: 963) (no date given). Fantham, Stephens, and Theobald (1916) on page 808 of *The Animal Parasites of Man* give their reference as follows: "Leuckart, R. (in Manson, P.). Diseases of the skin in tropical climates; Davidson: Hygiene and Diseases of Warm Climates, Edinb., London, 1893, p. 963." In the "Index Catalogue of Medical and Veterinary Zoology (Roundworms)", published in 1920 in *Bulletin No. 114 of the United States Public Health Service Hygienic Laboratory*, Stiles and Hassall (: 495) list this same reference as the earliest one for *volvulus*, while giving a still earlier reference (1892—see below) for the name *volvulas*, considering this to be an error for *volvulus*. J. H. Sandground in 1934, in Part 2 (: 138) of Strong, Sandground, Bequaert, and Ochoa, "Onchocerciasis with Special Reference to the Central American Form

of the Disease" (Contribution No. 6, Dept. Trop. Med. and Inst. Trop. Biol. and Med., Harvard University) states: "Under the name of *Filaria volvulus*, Leuckart in 1893 presented a brief description of a parasite that occurred in prominent nodules under the skin of natives in the Gold Coast of Equatorial West Africa". This would infer that Leuckart actually published a description but this is not the case. Various other authors give the reference for Leuckart's description as "Leuckart, R., 1893, Die Parasiten des Menschen und die von ihnen herrührenden Krankheiten. Ein Hand und Lehrbuch für Naturforscher und Aerzte. 2 Aufl. Leipzig". This volume contains no discussion whatsoever of *Filaria volvulus*. Railliet and Henry, in "Les onchocercques, nematodes parasites du tissu conjonctif" (1910, *Compt. Rend. Soc. Biol.*, Paris, 68 (No. 6) : 248-251 (250-51)) transferred the species from the genus *Filaria* Müller to *Onchocerca* Diesing, but gave no reference to the original description of the species other than the listing as "*Onchocerca volvulus* (Leuckart, 1893).—Syn. : *Filaria volvulus* Leuckart, 1893". To settle this problem, a study of the literature was undertaken, and the following information was secured.

3. The parasite was first mentioned in the literature by Sir Patrick Manson in an article entitled: "The geographical distribution, pathological relations, and life history of *Filaria sanguinis hominis diurna* and of *Filaria sanguinis hominis perstans*, in connexion with preventive medicine", which appears in the *Trans. 7th Internatl. Cong. Hyg. and Demog.*, London, August 1891, 1 (Sect. 1) : 88. The date of this article is somewhat confused. Included on the title page is the year "1891" for the time when the Congress took place; the year "1892" is given as the date of printing and "December 1892" for the date of transmittal. In view of the importance of ascertaining the exact date of publication of Manson's paper containing the name *Filaria volvulus*, I have made a special investigation of this subject with the help of the Library of Congress. I find that the printing of volume 1 (Section 1) of the *Trans. Int. Congr. Hyg. Demogr.* was authorised at the end of 1891, but that a fire in the printing office caused a delay with the result that work could not get started until well into 1892. Volumes 1 to 4 (which in library copies are usually bound up together) were published as separate units towards the close of 1892, while the remaining nine volumes of the Congress were not published until 1893. I find also that the numbering of the Congresses does not always correspond with the appropriate *Transactions*, since at one point there was a change in the numbering system. Thus, the Congress with which we are here concerned may be known either as the seventh or as the ninth of the series. It has been suggested to me by the Library of Congress that the reference for *Filaria volvulus* in Manson's paper should be given as follows:—*Trans. Seventh int. Congr. Hyg. Demogr. London, August 1891 vol. 1, Section 1, p. 88, 1892*. Manson's discussion of the parasite in the foregoing paper was based on information and slides sent to him by Leuckart. It cannot be ascertained from the literature whether the spelling *volvulus*, as used in this paper, was the result of a typographical error or was actually the spelling used by Leuckart or Manson.

4. The above "original description" is mentioned by Railliet in the Second Edition of his *Traité de Zoologie médicale et agricole* (: 522) published in 1893, where however he erroneously spelled the name as *Filaria volvulus*. Railliet, however, gave the date of Manson's article as "1893", rather than as "1892", the date given by Stiles and Hassall which is now seen to be correct.

5. Manson discussed this parasite again in 1893, this time in his paper entitled "Diseases of the Skin in Tropical Climates" which forms Chapter 24 (: 928-995) of the work *Hygiene and Diseases of Warm Climates* edited by Andrew Davidson. In this paper the name of this parasite appeared (: 963) as *Filaria volvulus*. This is the reference which is usually cited for the original description of this parasite, the earlier paper in the *Trans. Seventh int. Congr. Hyg. Demogr.* being overlooked.

6. In 1896, R. Blanchard, in his "Animaux parasites", published in the *Traité de Pathologie générale* (Bouchard) (2 : 649-810 (783)), gave a short description of the worm and used the presently accepted spelling of *volvulus*. Labadie-Lagrave and Deguy offered a description of a single female, based on histological preparations, published in an article entitled "Un cas de *Filaria volvulus*", published in the *Archives de Parasitologie*, 2 (No. 3) : 451-460, 1899. The first extensive description of the adults and embryos of the parasite was given by W. T. Prout in "A filaria found in Sierra Leone. ?*Filaria volvulus* (Leuckart)" (1901, *Brit. med. J.* 1901, 1 : 209-211).

7. By common acceptance of all authors subsequent to Manson, this species has been known by the name *volvulus* and that name has been credited to Leuckart. Great and quite unnecessary confusion would result if this name were to be credited to any other author or if its spelling were to be changed. It is accordingly recommended that a Ruling be given by the Commission that this name in the combination *Filaria volvulus* be attributed to Leuckart and be treated as having been published by him in 1892 in Manson's paper on *Filaria sanguinis hominis diurna* and *Filaria sanguinis hominis perstans*, to which reference has already been made. As has already been explained, this name appeared in the paper referred to above with the spelling "volvulus" and it is part of the present proposal that this spelling should be replaced by the currently accepted spelling "volvulus". It is recognised that under the decisions in regard to the emendation of names taken by the Fourteenth International Congress of Zoology, Copenhagen, 1953, the use of the Commission's Plenary Powers will be needed in order to validate the spelling "volvulus" as the name for this species. As regards the authorship of this name, it seems likely that, although Manson obtained it from Leuckart, the manner in which it was published by Manson in the paper in question is such that under the *Règles*, it should be attributed to that author and not to Leuckart. It is suggested therefore that, when dealing with this portion of the present application, the Commission should also do so under its Plenary Powers.

8. For the reasons set forth above, the International Commission on Zoological Nomenclature is asked :—

(1) to use its Plenary Powers :—

(a) to direct that the name *Filaria volvulus*, as published in 1892 in a paper by Manson entitled "The geographical distribution, pathological relations and life history of *Filaria sanguinis hominis diurna* and of *Filaria sanguinis hominis perstans* in connection with preventive medicine" (*Trans. Seventh int. Congr. Hyg. Demogr.* 1 (Sect. 1) : 88) be attributed to Leuckart (K.G.F.R.) ;

(b) to approve the emendation to *volvulus* of the name *volvulus* Leuckart, [1892], as published in the combination *Filaria volvulus* ;

(2) to place the specific name *volvulus* (emend. of *volvulus*) Leuckart, [1892], as published in the combination *Filaria volvulus*, on the *Official List of Specific Names in Zoology*, with a note specifying the decisions proposed under (1) above to be taken under the Plenary Powers ;

(3) to place the under-mentioned specific names on the *Official Index of Rejected and Invalid Specific Names in Zoology* :—

(a) *volvulus* Leuckart, [1892], as published in the combination *Filaria volvulus* (an Invalid Original Spelling for *volvulus*, under the Ruling proposed under (1)(b) above, to be given under the Plenary Powers) ;

(b) *volvulans* Railliet, 1893, as published in the combination *Filaria volvulans* (an Erroneous Subsequent Spelling for *volvulus* (emend. of *volvulus*) Leuckart, [1892], as published in the combination *Filaria volvulus*) ;

(c) *volvulus* Manson, 1893, as published in the combination *Filaria volvulus* (an Erroneous Subsequent Spelling for *volvulus* (emend. of *volvulus*) Leuckart, [1892], as published in the combination *Filaria volvulus*).

**PROPOSED USE OF THE PLENARY POWERS TO SUPPRESS THE
GENERIC NAME "ASAPHUS" AS PUBLISHED BY BRONGNIART
IN DESMAREST, 1817, AND TO DESIGNATE A TYPE SPECIES
IN HARMONY WITH GENERAL USAGE FOR THE GENUS
"ASAPHUS" BRONGNIART, 1822 (CLASS TRILOBITA)**

By **VALDAR JAANUSSON**

(*Paleontologiska Institutionen, Uppsala Universitet, Sweden*)

Plate 1

(Commission Reference : Z.N.(S.) 636)

The object of the present application is to ask the International Commission on Zoological Nomenclature to use its Plenary Powers to suppress the generic name *Asaphus* as published by Brongniart in Desmarest, 1817, and to designate as the type species of *Asaphus* Brongniart, 1822, the species generally accepted as such, thereby avoiding the serious confusion which would inevitably result from the application of the normal provisions of the *Règles* in this case. It is hoped that it will be possible for the International Commission to give an early decision on the present application, since a decision is urgently required in connection with the preparation of the relevant portion of the forthcoming *Treatise on Invertebrate Paleontology*. The details relating to this case are set out in the following paragraphs.

2. The generic name *Asaphus* was published by Brongniart in Desmarest, 1817 (:517). The only nominal species included by him in the genus were *A. Debuchianus* n. sp. and *A. Haussmannii* n. sp. According to the current classification the former species is placed in the asaphid genus *Ogygiocaris* Angelin, 1854, while the latter species is regarded as the type species of *Odontochile* Hawle & Corda, 1847, and belongs to a group of trilobites generally considered unrelated to the asaphids (*Phacopidacea*).

3. The genus *Asaphus* was redescribed by Brongniart in Brongniart & Desmarest, 1822 (:17—25). In addition to the two species mentioned in paragraph 2 above, the nominal species *Trilobites cornigerus* Schlotheim, 1820, *Trilobus caudatus* Brönnich, 1781, and *Entomostracites laticauda* Wahlenberg, 1821, were on this occasion included in the genus.

4. Subsequent writers generally have considered the generic name *Asaphus* to have been established by Brongniart in 1822, and, in fact, I do not know in the literature after Brongniart, 1822, any reference to the genus *Asaphus* as established in Desmarest, 1817.

5. Although S. A. Miller 1889 (: 531) selected *A. cornigerus* (Schlotheim, 1820) as the type, the type species for the genus *Asaphus* Brongniart, 1822, generally accepted in the literature is *Asaphus expansus* (Wahlenberg) (Vogdes, 1890 : 84 ; Reed, 1930 : 289 ; Jaanusson, 1953 : 391 ; Balaschova, 1953 : 386).

6. Neither of the species originally included by Brongniart in *Asaphus* in 1817 belong to this genus in its universally accepted sense. The selection of one of them as the type species of *Asaphus* would, therefore, create serious confusion both in trilobite taxonomy and in Lower Ordovician stratigraphy. As the 1817 publication of this generic name has completely escaped the attention of trilobite workers up till now, the suppression of the generic name *Asaphus* as published by Brongniart in Desmarest in that year would best serve the interests of stability in nomenclature.

7. Of the species included by Brongniart in Brongniart & Desmarest, 1822, in the genus *Asaphus* only *Trilobites cornigerus* Schlotheim, 1820, belongs to the genus in its accustomed sense, the other species having been transferred to other genera long ago, and, with the exception of *Asaphus Debuchianus*, even to other families. As regards *Asaphus cornigerus* (Schlotheim), Brongniart (1822 : 18) stated : " Cette espèce semble s'éloigner beaucoup des suivantes et former une division particulière. Elle constituerait à elle seule le genre Asaphe, si des observations ultérieures prouvaient que les autres espèces doivent être réunies soit aux Calymènes, soit aux Ogygies ". This can be interpreted as a kind of designation of the type species. The specific name *Trilobites cornigerus* was published by Schlotheim in 1820 (: 38) but already in 1810 (: 1, Pl. 1, figs. 1—3) the species had been described and figured by him without a specific name (*Trilobites novus*). Fr. Schmidt (1898 : 2—3 ; 1901 : 2—3) had an opportunity of examining the original specimen figured by Schlotheim in 1810 as figure 1 on Plate 1 in connection with his monographic treatment of the genus *Asaphus*. At first (1898 : 2—3) he was inclined to regard this specimen as conspecific with *Asaphus kowalewskii* Lawrow, 1856, but after a renewed examination of this specimen he considered it to be too fragmentary for specific determination (1901 : 2—3). He stated (*loc. cit.*) that " der *A. cornigerus* Schloth. ist von vorn herein auf zu mangelhaftes Material fundiert und so mangelhaft beschrieben worden, dass ich seine Rehabilitierung für nicht zuverlässig halten kann ". The other specimens figured by Schlotheim, 1810 on Pl. 1, namely those shown as figs. 2 and 3, were apparently not traceable even at the time when Fr. Schmidt had access to his original material. According to Fr. Schmidt (1898 : 3) these figures obviously represent specimens not conspecific with that shown on Schlotheim's Pl. 1, fig. 1 [" stellen augenscheinlich andere Asaphiden vor "]. On the basis of Schlotheim's figures alone these specimens are, however, specifically indeterminable. According to information received from Professor W. Gross, Humbolt-Universität, Berlin (*in litt.* March 22nd, 1952) all the original material of Schlotheim was lost during the recent war. *Trilobites cornigerus* Schlotheim, 1820, was

considered as a *nomen dubium* by Jaanusson (1953 : 393) and as such the nominal species so named is wholly unsuitable for selection as a type species. From the point of view of promoting stability of nomenclature within the genus *Asaphus* in its accustomed use it would be best to suppress the specific name *cornigerus* Schlotheim, 1820, as published in the combination *Trilobites cornigerus*.

8. *Entomostracites expansus* Wahlenberg was considered by Brongniart (1822 : 18, footnote 1, cf. also : 19) as a junior subjective synonym of *Asaphus cornigerus* (Schlotheim, 1820). He evidently attributed the specific name *expansus* to Wahlenberg, 1821, and used for this species the older name of Schlotheim (1820). Wahlenberg, 1821, on the other hand, regarded Linnaeus (1768) as the founder of the specific name *expansus* and listed (: 25) *Trilobites novus* of Schlotheim, 1810 [= *cornigerus* Schlotheim, 1820] as a synonym of *Entomostracites expansus* (Linnaeus, 1768). Wahlenberg's main paper on the trilobites was already printed in 1818, as is evident *inter alia* from the introduction to his "Additamenta" (Wahlenberg 1821 : 293) and preprints of this paper were evidently also distributed separately in this year. Under the *Règles* preprints issued in this way have no status for nomenclatorial purposes (1950, *Bull. zool. Nomencl.* 4 : 146, Point 19(b)). Volume 8 of the *Nova acta Regiae Soc. Sci. Upsaliensis* which includes both the main trilobite paper of Wahlenberg and also his "Additamenta" was published and distributed first in 1821. According to the *Règles* both papers date from 1821. The main trilobite paper of Wahlenberg is usually referred to in the literature as "Wahlenberg 1818 (1821)" or "(1818) 1821", and his "Additamenta" as "Wahlenberg 1821". Owing to the fact that the main trilobite paper of Wahlenberg, 1821, was printed prior to the paper of Schlotheim (1820) no mention is made in it of the specific name *Trilobites cornigerus* Schlotheim, 1820.

9. The specific name *expansus* was used for this trilobite first by Linnaeus (1768 : 160) as *Entomolithus paradoxus* α *expansus*. In the International Commission's *Opinion* 296 (1954), however, the *Regnum Lapidum* of the Twelfth Edition of the *Systema Naturae* by Linnaeus (1768) has been suppressed for nomenclatorial purposes. The specific name *expansus* is, therefore, available first from the next description which was given to it, namely that by Wahlenberg, 1821, under the name *Entomostracites expansus*. Wahlenberg did not illustrate this species but his collection preserved at the Museum of the Palaeontological Institute, Uppsala University, includes many specimens of the species generally recognised as *Asaphus expansus*, and several of these specimens are also accompanied by labels bearing the name "*Entomostracites expansus*" in Wahlenberg's own handwriting. Naturally, the concept of the species was broader in Wahlenberg's time than it is today, and several other *Asaphus* species were included by him in *Entomostracites expansus*. The specimens of the species later generally determined as *Asaphus expansus* are, however, more numerous in Wahlenberg's collection than are the specimens of other species also included by him in his *Entomostracites expansus*.

In order to preserve the specific name *Asaphus expansus* for use in harmony with accustomed practice, one of the former specimens should be selected as the lectotype of the nominal species *Entomostracites expansus* Wahlenberg, 1821. The specimen bearing the Number Ög. 23 is accordingly here selected as the lectotype. On the label accompanying this specimen is written in an unknown hand "Canalen vid Heda, Ljung eller Wreta Kloster", and in Wahlenberg's handwriting "Entom. expansus". The specimen is figured on the plate annexed to the present application. The following labels are attached to the specimen: Heda [= name of the locality] and "Pal. Inst. Uppsala. Wahlenbergs samling. Nr. Ög. 23".

10. It must be noted at this point that in 1953 (: 391) Balaschova selected a lectotype for *Asaphus expansus*, which, following Fr. Schmidt (1898 : 19) she attributed to Dalman. The specimen chosen by Balaschova was from Isvos, Volchov, Ingermanland (Leningrad district) which had been figured by Fr. Schmidt in 1901 (pl. 1, fig. 2). Further, as a precautionary measure Balaschova at the same time designated a neotype, also from the Leningrad district. It is necessary to take note here that, although Balaschova attributed the name *expansus* to Dalman, Dalman himself correctly attributed this name to Wahlenberg. Under the rules laid down by the Copenhagen Congress of 1953 no neotype can be validly selected for any nominal species for which any part of the original type material is extant. As has been shown in paragraph 9 above, numerous specimens of Wahlenberg's are still preserved and accordingly no neotype for *expansus* Wahlenberg can validly be selected by any author. Similarly, no lectotype for a nominal species can be validly selected except from among the surviving syntypes of the species concerned, and, as the lectotype selected by Balaschova was not one of Wahlenberg's specimens, her lectotype selection is invalid.

11. As pointed out in paragraph 5 above, the species accepted as the type species of *Asaphus* Brongniart, 1822, by all modern authors is *Entomostracites expansus* Wahlenberg and any disturbance of this practice would lead to serious and quite unjustified confusion. It is accordingly proposed that the Commission should under its Plenary Powers set aside all type selections hitherto made for the genus *Asaphus* Brongniart, 1822, and that, having done so, it should designate the foregoing species to be the type species of this genus.

12. The generic name *Asaphus* Brongniart, 1822, was taken as the base for a family name ASAPHIDAE by Burmeister in 1843 (: 118). This name should now be placed on the *Official List of Family-Group Names in Zoology*.

13. In the light of the considerations advanced in the present application, the International Commission on Zoological Nomenclature is asked :—

(1) to use its Plenary Powers :

(a) to suppress the under-mentioned generic name for the purposes both of the Law of Priority and of the Law of Homonymy :
Asaphus Brongniart, 1817 ;

(b) to suppress the under-mentioned specific name for the purposes of the Law of Priority but not for those of the Law of Homonymy :
cornigerus Schlotheim, 1820, as published in the combination
Trilobites cornigerus ;

(c) to set aside all type selections for the genus *Asaphus* Brongniart, 1822, made prior to the Ruling now asked for and, having done so, to designate *Entomostracites expansus* Wahlenberg, 1821, as defined by the lectotype selected in paragraph 9 of the present application, to be the type species of the foregoing genus ;

(2) to place the under-mentioned generic name on the *Official List of Generic Names in Zoology* : *Asaphus* Brongniart, 1822, as validated under the Plenary Powers under (1)(a) above (gender : masculine) (type species, by designation under the Plenary Powers under (1)(c) above : *Entomostracites expansus* Wahlenberg, 1821, as defined in (1)(c) above) ;

(3) to place the under-mentioned specific name on the *Official List of Specific Names in Zoology* : *expansus* Wahlenberg, 1821, as published in the combination *Entomostracites expansus* and as defined by the lectotype specified in (1)(c) above (specific name of type species of *Asaphus* Brongniart, 1822) ;

(4) to place the under-mentioned generic name on the *Official Index of Rejected and Invalid Generic Names in Zoology* : *Asaphus* Brongniart, 1817, as suppressed under the Plenary Powers under (1)(a) above ;

(5) to place the under-mentioned specific names on the *Official Index of Rejected and Invalid Specific Names in Zoology* :—

(a) *expansus* Linnaeus, 1768, as published in the combination
Entomolithus paradoxus [var.] α *expansus* (published in a work rejected for nomenclatorial purposes) ;

(b) *cornigerus* Schlotheim, 1820, as published in the combination
Trilobites cornigerus, as suppressed under the Plenary Powers under (1)(b) above ;

(6) to place the under-mentioned family-group name on the *Official List of Family-Group Names in Zoology* : *ASAPHIDAE* Burmeister, 1843 (type genus : *Asaphus* Brongniart, 1822).

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Explanation to Plate 1

Illustrations of the Lectotype of *Entomostracites expansus* Wahlenberg, 1821 (*Asaphus expansus* (Wahlenberg, 1821)), here selected. Palaeontological Institute, Uppsala University, No. Ög. 23.

All the figures are twice the natural size. The specimen is whitened with ammonium chloride. The photographs are by Mr. N. Hjorth, Palaeontological Institute, Uppsala University. They have not been retouched.

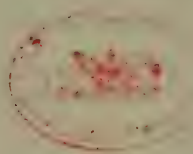
Fig. 1. Dorsal view of the cephalon and the foremost thoracic segments

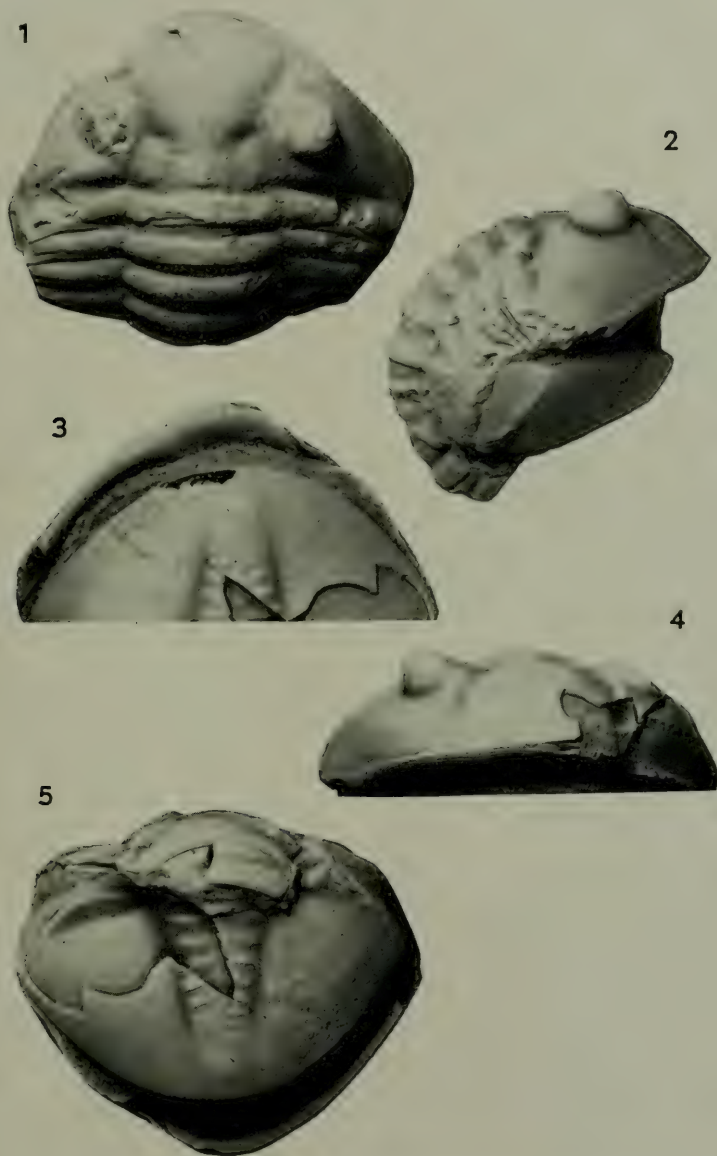
Fig. 2. Lateral view of the dorsal exoskeleton

Fig. 3. Ventral view of the cephalon to show the cephalic doublure

Fig. 4. Anterior view of the cephalon

Fig. 5. Dorsal view of the pygidium





Lectotype of *Entomostracites expansus* Wahlenberg, 1821 (*Asaphus expansus* (Wahlenberg, 1821)).

For explanation of figs. see opposite page.



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Edited by
FRANCIS HEMMING, C.M.G., C.B.E.

Secretary to the International Commission on Zoological Nomenclature

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BULLETIN OF ZOOLOGICAL NOMENCLATURE

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NOTICES PRESCRIBED BY THE INTERNATIONAL CONGRESS OF ZOOLOGY

The following notices are given in pursuance of decisions taken, on the recommendation of the International Commission on Zoological Nomenclature (see 1950, *Bull. zool. Nomencl.* 4 : 51—56, 57—59), by the Thirteenth International Congress of Zoology, Paris, July 1948 (see 1950, *Bull. zool. Nomencl.* 5 : 5—13, 131).

(a) Date of commencement by the International Commission on Zoological Nomenclature of Voting on applications published in the "Bulletin of Zoological Nomenclature"

NOTICE is hereby given that normally the International Commission will start to vote upon applications published in the *Bulletin of Zoological Nomenclature* on the expiry of a period of six calendar months from the date of publication in the *Bulletin* of the applications in question. Any specialist who may desire to comment upon any of the applications published in the present Part (Vol. 12, Part 4) of the *Bulletin* is accordingly invited to do so in writing to the Secretary to the Commission, as quickly as possible and in any case, in sufficient time to enable the communication in question to reach the Secretariat of the Commission before the expiry of the six-month period referred to above.

(b) Notice of the possible use by the International Commission on Zoological Nomenclature of its Plenary Powers in certain cases

NOTICE is hereby given that the possible use by the International Commission on Zoological Nomenclature of its Plenary Powers is involved in applications published in the present Part of the *Bulletin of Zoological Nomenclature* in relation to the following cases :—

- (1) *depurator* Linnaeus, 1758 (*Cancer*), validation of neotype for (Class Crustacea, Order Decapoda) (Z.N.(S.) 1031);

Notices prescribed by the International Congress of Zoology (*continued*)

- (2) *Cherax*, emendation to, of *Cheraps* Erichson, 1846, and *Palinurus*, emendation to, of *Pallinurus* Weber, 1795, validation of; *goudotti* Guérin-Ménéville, 1839 (*Astacoides*), suppression of (Class Crustacea, Order Decapoda) (Z.N.(S.) 1039);
- (3) *ferox* Gmelin, 1771 (*Accipiter*), suppression of (Class Aves) (Z.N.(S.) 1052);
- (4) *Maja* Lamarck, 1801 (Class Crustacea, Order Decapoda), validation of, and designation of type species for, in harmony with accustomed usage (Z.N.(S.) 1074).

2. Comments received in sufficient time will be published in the *Bulletin*: other comments, provided that they are received within the prescribed period of six calendar months from the date of publication of the present Part will be laid before the International Commission on Zoological Nomenclature at the time of commencement of voting on the application concerned.

3. In accordance with the procedure agreed upon at the Session held by the International Commission on Zoological Nomenclature in Paris in 1948 (see 1950, *Bull. zool. Nomencl.* 4 : 56), corresponding Notices have been sent to the serial publications *Nature* and *Science*.

FRANCIS HEMMING

*Secretary to the International Commission on
Zoological Nomenclature*

28 Park Village East, Regent's Park,
LONDON, N.W.1, England.

20th July 1956.

**PROPOSED USE OF THE PLENARY POWERS TO SECURE THAT
THE SPECIFIC NAME "DEPURATOR" LINNAEUS, 1758, AS
PUBLISHED IN THE COMBINATION "CANCER DEPURATOR"
(CLASS CRUSTACEA, ORDER DECAPODA) SHALL VALIDLY
APPLY TO THE SPECIES COMMONLY SO KNOWN**

By **L. B. HOLTHUIS**

(*Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands*)

Plate 2

(Commission Reference : Z.N.(S.) 1031)

The present application deals with a specific name given by Linnaeus (1758) to a common Portunid crab inhabiting European waters. A most undesirable situation exists at this moment because of the fact that this specific name is widely used for another well known, but quite different species of European crab. The use by the International Commission of its Plenary Powers is requested here as the only means to end this highly objectionable state of affairs in a satisfactory way.

2. At least three species of swimming crabs (family PORTUNIDAE) have been indicated at one time or another with the specific name *depurator* Linnaeus, 1758. These three species are indicated here as A, B, and C, respectively ; their synonymy will be dealt with in this order.

Synonymy of Species " A "

3. The names which have been bestowed upon Species " A " are the following :—

Cancer depurator Linnaeus, 1758, *Syst. Nat.* (ed. 10) 1 : 627.

Cancer latipes Pennant, 1777, *Brit. Zool.* (ed. 4) 4 : 3.

Cancer lysianassa Herbst, 1801, *Versuch Naturgesch. Krabben Krebse* 3(2) : 43.

Portumnus variegatus Leach, 1814, *Edinb. Ency.* 7 : 391.

Platyonichus variegatus Latreille, 1818, *Nouv. Dict. Hist. nat.* **27** : 5.

Platyonichus depurator Latreille, 1825, *Ency. méth. Hist. nat. Ins.* **10** : 152

Platyonichus latipes Milne Edwards (H.), 1834, *Hist. nat. Crust.* **1** : 436.

Portumnus latipes Dana, 1853, *U.S. Explor. Exped.* **13**(2) : 1568.

4. In the tenth edition of his *Systema Naturae*, Linnaeus described the species *Cancer depurator* as follows :—

“C.[ancer] brachyurus, thorace laevi utrinque subquinqüedentato, manibus apice compressis, pedibus posticis ovatis.

Planc. conch. **34. t. 3. f. 7.**

Habitat in M. Mediterraneo.

Frons inter oculos dentibus tribus. Digitus fixus chelarum valde compressus”.

5. Plancius's figure is of a very good quality and represents quite accurately the species which at present is generally known under the name *Portumnus latipes* (Pennant, 1777). Linnaeus's description fits very well for that species, his reference to the smooth carapace and the strongly compressed fingers especially being significant. There cannot be the slightest doubt therefore as to the identity of *Cancer depurator* Linnaeus with *Cancer latipes* Pennant.

6. Leach (1814) made *Cancer latipes* Pennant the type species of a new genus *Portumnus*, giving the species at the same time the new substitute name *Portumnus variegatus*. Latreille (1818, *Nouv. Dict. Hist. nat.* **27** : 4) proposed the new generic name *Platyonichus* to replace *Portumnus* Leach, 1814, which according to him too much resembled the generic name *Portunus* Weber, 1795. In 1825 Latreille evidently recognised that the specific name *depurator* was the oldest available name for *Portumnus variegatus* (= *Cancer latipes*), which species therefore was named by him *Platyonichus depurator*. As far as I can ascertain, this is the last time that the specific name *depurator* was used in the correct sense. H. Milne Edwards (1834) in his monograph of the Crustacea, and most subsequent authors used for this species the specific name *latipes*; a few British authors (such as Bell, 1844—1846, *Hist. Brit. stalk-eyed Crust.* : 85) around the middle of the last century still followed Leach in using the specific name *variegatus*, but later the name *latipes* Pennant was almost universally adopted. This name is found in all modern carcinological handbooks and

treatises (e.g. Pesta, 1918, *Decapodenf. Adria* : 397; Schellenberg, 1928, *Tierw. Deutschl.* 10 (2) : 115; Marine biol. Ass., 1931, *Plymouth mar. Fauna* (ed. 2) : 216; Nobre, 1936, *Fauna mar. Portug.* 4 : 28; Bouvier, 1940, *Faune de France* 37 : 231; Zariquiey, 1946, *Publ. Biol. Medit. Inst. Esp. Est. Medit.* 2 : 151).

7. The generic name *Platyonichus* Latreille, 1818, was used for the genus *Portumnus* by several authors during the first two thirds of the XIXth century, such as H. Milne Edwards (1834, *Hist. nat. Crust.* 1 : 436), A. Milne Edwards (1861, *Arch. Mus. Hist. nat. Paris* 10 : 410), and Heller (1863, *Crust. südl. Europ.* : 91). At the suggestion of Bell (1844—1846, *Hist. Brit. stalk-eyed Crust.* : 83), Dana (1851, *Amer. Journ. Sci.* (2) 12 : 130), and Miers (1874, *Zool. Erebus Terror* 20 : 2), the genus *Portumnus* (= *Platyonichus*) was split into two genera. For the genus containing *Cancer latipes* the generic name *Portumnus* was retained, the other genus was (incorrectly) given the name *Platyonichus* (this latter genus at present is known under the name *Ovalipes* Rathbun, 1898). During the last thirty years of the nineteenth and throughout the present century the name *Portumnus* was generally accepted, and it is found in practically all modern handbooks. Of the handbooks mentioned above, only that by Nobre cites the present genus as *Platyonichus* (in the Erroneous Subsequent Spelling *Platyonychus* first published by Voigt in 1836 (Cuvier's *Thierreich* 4 : 104)).

Synonymy of Species "B"

8. The following are the names which have been used for Species "B" :—

Cancer depurator Pennant, 1777, *Brit. Zool.* (ed. 4) 4 : 4 (non Linnaeus, 1758).

Portunus holsatus Fabricius, 1798, *Suppl. Ent. syst.* : 366.

Portunus lividus Leach, 1814, *Edinb. Ency.* 7 : 390.

Liocarcinus holsatus Stimpson, 1870, *Bull. Mus. comp. Zool.* 2 : 146.

9. When Pennant (1777) gave the new name *Cancer latipes* to the true *Cancer depurator* Linnaeus, he used the name *Cancer depurator* for another species of swimming crab, the oldest available name of which is *Portunus holsatus* Fabricius, 1798. The same species was described as new by Leach, 1814, under the name *Portunus lividus*. H. Milne Edwards (1834, *Hist. nat. Crust.* 1 : 443) correctly used the specific name *holsatus* for this species and has been followed in this by practically all subsequent authors. In all modern

carcinological handbooks and revisions the name *Portunus holsatus* is used for this species (Lagerberg, 1908, *Göteborg. K. Vetensk. Samh. Handl.* (4) 11(2) : 90; Stephensen, 1910, *Danm. Fauna* 9 : 52; Palmer, 1927, *J. mar. biol. Ass. U.K.* (n. ser.) 14 : 889; Schellenberg, 1928, *Tierw. Deutschl.* 10(2) : 121; Mar. biol. Ass., 1931, *Plymouth mar. Fauna* (ed. 2) : 215; Nobre, 1936, *Fauna mar. Portug.* 4 : 35; Bouvier, 1940, *Faune de France* 37 : 243; Zariquiey, 1946, *Publ. Biol. Medit. Inst. Esp. Est. Medit.* 2 : 154, 156). As has been decided by the International Commission on Zoological Nomenclature in its *Opinion* 394 (now in the press) the correct generic name for the genus containing this species is *Macropipus* Prestandrea, 1833.

Synonymy of Species "C"

10. The following are the names which have been applied to Species "C":—

Cancer depurator var. Pennant, 1777, *Brit. Zool.* (ed. 4) 4 : 4.

Portunus depurator Leach, 1814, *Edinb. Ency.* 7 : 390 (non *Cancer depurator* L.)

Portunus plicatus Risso, 1816, *Hist. nat. Crust. Nice* : 29.

11. The species dealt with here, was incorrectly identified as *Portunus depurator* by Leach. It was described as new in 1816 by Risso, who named it *Portunus plicatus*. Risso's name was adopted by H. Milne Edwards (1834, *Hist. nat. Crust.* 1 : 442), but practically all subsequent authors followed Leach in the use of the name *depurator* for this species. In all the modern handbooks cited in paragraph 9 above the species is dealt with under the specific name *depurator*. As in the case of Species "B", the correct generic name here is *Macropipus* Prestandrea, 1833.

Summary and Recommendations

12. Summarising, we find that at present the correct specific name *holsatus* Fabricius, 1798, is used for Species "B", but that the names that are in common use for Species "A" and "C" are nomenclatorially incorrect. Species "A" currently is named *Portumnus latipes* (Pennant, 1777), but should be known as *Portumnus depurator* (Linnaeus, 1758), while species "C" is generally known as *Portunus depurator* (Linnaeus, 1758) but actually should be named *Macropipus plicatus* (Risso, 1816). Since the foregoing incorrect specific names have been consistently used for Species "A" and "C" for more than 100 years, it seems best to validate these names under the Plenary Powers of the International Commission on Zoological Nomenclature. Not only is this necessary in order to avoid the changing of long established usage

but in addition it is required if the highly confusing and objectionable transfer of the specific name *depurator* Linnaeus, 1758, from Species "C" to Species "A" is to be avoided. There are two ways by which this end might be attained. The first would be for the Commission to validate the name *Portunus depurator* as from Leach, 1814, by suppressing all previous uses of the name *depurator* under its Plenary Powers. The other solution would be for the Commission to approve under its Plenary Powers the designation of a specimen of *Portunus plicatus* Risso, 1816 (*Macropipus plicatus* (Risso)) to be the neotype of *Cancer depurator* Linnaeus, 1758, despite the fact that, contrary to the virtually unanimous interpretation by later authors, Linnaeus's description does not fit this species. The second of these courses seems preferable, partly because it excludes the possibility of the subsequent re-opening of the present case through the discovery of a name for this species having priority over *depurator* as published by Leach in 1814, and partly because it avoids any change in the authorship customarily attributed in this case. It may be noted that the procedure suggested in this case is exactly parallel to that recently approved by the Commission when dealing with an application in regard to the name *Coluber sirtalis* Linnaeus, 1758 (Class Reptilia) (Schmidt & Conant, 1951, *Bull. zool. Nomencl.* 2: 67—68), as for that species also the Commission approved under its Plenary Powers the designation as the neotype of a specimen which did not belong to the species described by Linnaeus under the above name (*Opinion* 385).

13. As a preliminary to the submission of the present application, I have therefore designated a specimen of *Portunus plicatus* Risso to be the neotype of *Cancer depurator* Linnaeus, subject to approval being given by the Commission under its Plenary Powers of the designation so made. Full particulars regarding the neotype designated are given in the Annexe to the present application. A plate showing a life-size photograph of the neotype is also attached.

14. The recommendations submitted in the present application have been the subject of consultations with, and are supported by, the following specialists: (a) Dr. J. Forest (*Muséum National d'Histoire Naturelle, Paris*); (b) Dr. I. Gordon (*British Museum (Natural History)*); (c) Dr. Th. Monod (*Institut d'Afrique Noire, Dakar*); (d) Dr. R. Zariquiey, *Barcelona, Spain*).

15. The concrete proposals now submitted are that the International Commission on Zoological Nomenclature should:—

- (1) direct under its Plenary Powers that the nominal species *Cancer depurator* Linnaeus, 1758, is to be interpreted by reference to the specimen designated and figured as the neotype of that species by the present applicant in the Annexe to the present application;

(2) place the under-mentioned names on the *Official List of Specific Names in Zoology* :—

(a) *depurator* Linnaeus, 1758, as published in the combination *Cancer depurator*, and as proposed to be determined under the Plenary Powers by the neotype specified in (1) above ;

(b) *holsatus* Fabricius, 1798, as published in the combination *Portunus holsatus* ;

(c) *latipes* Pennant, 1777, as published in the combination *Cancer latipes* (specific name of type species of *Portumnus* Leach, 1814) ;

(3) place the under-mentioned generic names on the *Official Index of Rejected and Invalid Generic Names in Zoology* :—

(a) *Platyonichus* Latreille, 1818 (a junior objective synonym of *Portumnus* Leach, 1814) ;

(b) *Platyonychus* Voigt, 1836 (an Erroneous Subsequent Spelling of *Platyonichus* Latreille, 1818) ;

(4) place the under-mentioned specific name on the *Official Index of Rejected and Invalid Specific Names in Zoology* : *variegatus* Leach, 1814, as published in the combination *Portumnus variegatus* (a junior objective synonym of *latipes* Pennant, 1777, as published in the combination *Cancer latipes*).

16. No action is required in regard to the generic names *Portumnus* Leach, 1814, or *Macropipus* Prestandrea, 1833, since both these names have already been placed on the *Official List of Generic Names in Zoology*, the first by the Ruling given in *Opinion* 73, the second by that in *Opinion* 394. Similarly, no action is called for in regard to the family-group name *PORTUNIDAE* Rafinesque, 1815, since this was placed on the *Official List of Family-Group Names in Zoology* by the Ruling given in the later of the *Opinions* cited above.

ANNEXE

Designation of Neotype for “*Cancer depurator*” Linnaeus, 1758
 (“*Portunus depurator*” (Linnaeus, 1758))

By L. B. HOLTHUIS

(*Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands*)

Description : The specimen here designated as the neotype for *Cancer depurator* Linnaeus, 1758 (*Syst. Nat.* (ed. 10) 1 : 627) is an adult male with a





Cancer depurator Linnaeus, 1758

Neotype designated by Holthuis (L.B.) in the Annexe to the application submitted by him to the International Commission on Zoological Nomenclature (:105-106) in the present volume

carapace breadth of 53 mm. The characters exhibited by this specimen agree well with those given by Palmer (1927, *J. mar. biol. Ass. U.K.* (n.s.) **14** : 893) for the above nominal species there cited as *Portunus depurator* Linnaeus. The carapace is flattened with the dorsal surface coarsely tuberculate, showing numerous irregularly granular ridges and single tubercles. The frontal teeth are sharply pointed and three in number. The five anterolateral teeth are of about equal size, the posterior is not conspicuously longer than the others and is directed anteriorly. The legs are long and slender, the dactylus of the fifth leg is oval and shows no median ridge, its distal part is of a dark violet colour.

2. Locality of Neotype : The neotype here designated was caught on 9th August 1954 by a Spanish trawler in the Mediterranean off Cabo Norfeo near Rosas, N.E. Spain, at a depth of about 300 m. The specimen was bought on the same day at the Rosas fish market (leg. I. Gordon, R. Zariquiey and L. B. Holthuis).

3. Reference Number allotted to Neotype : The neotype here designated forms part of the collection of the Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands. It has been allotted the Registered Number "Decapoda 10374".

4. Label associated with the Neotype : The specimen is preserved in spirit and labelled as the neotype of *Cancer depurator* L. Apart from this indication, the parchment paper label associated with the specimen bears the modern name of the species : *Macropipus depurator* (L.), and the precise indications as to the locality, date, collectors and registered number, which are given in the previous paragraphs.

5. Figure of Neotype : A plate showing a life-size photograph of the neotype here designated is attached to the present note. For this photograph I am indebted to Mr. H. F. Roman.

SUPPORT FOR DR. L. B. HOLTUIS'S REQUEST FOR A DECISION AS TO THE OLDEST AVAILABLE NAME FOR THE TYPE SPECIES OF THE GENUS "PORTUNUS" LEACH, 1814 (CLASS CRUSTACEA, ORDER DECAPODA), A GENUS, THE NAME OF WHICH WAS PLACED ON THE "OFFICIAL LIST OF GENERIC NAMES IN ZOOLOGY" BY THE RULING GIVEN IN "OPINION" 73

By FRANCIS HEMMING, C.M.G., C.B.E.

(Secretary to the International Commission on Zoological Nomenclature)

(Commission Reference : Z.N.(S.) 1031)

(For the application in this case, see the preceding paper)

(Letter received 18th February 1956)

In September 1955 I submitted to the International Commission on Zoological Nomenclature proposals¹ for giving effect, so far as concerned the names of genera

¹The decision taken by the International Commission on the proposals here referred has since been embodied in *Direction 36* (now in the press).

of Decapod Crustacea placed on the *Official List of Generic Names in Zoology* in the period up to the end of 1936, to the General Directive issued to the Commission by the Thirteenth International Congress of Zoology, Paris, 1948, that arrangements should be made for placing on the *Official List of Specific Names in Zoology* of the specific name of the type species of every genus, the name of which had been placed on the *Official List* during the foregoing period, where that specific name was an available name and was considered to be the oldest such name for the species concerned. One of the generic names so involved was *Portumnus* Leach, 1814, which had been placed on the *Official List of Generic Names in Zoology* by the Ruling given in *Opinion* 73 published in 1922 (*Smithson. misc. Coll.* 73 (No. 1) : 23-31).

2. At the time when the Commission placed the name *Portumnus* Leach on the *Official List*, it made the following entry regarding the type species of the genus so named "mt. *P. latipes*=*Cancer latipes* Pennant, 1777=*P. variegatus* Leach, 1814". Reference to the original description confirms that *Portumnus* was a monotypical genus. It shows also that the sole included nominal species was *Portumnus variegatus* Leach, a nominal species then established, though quite unnecessarily, as a substitute for *Cancer latipes* Leach, 1877. Since the names *variegatus* Leach, 1814, and *latipes* Pennant, 1777, are objective synonyms of one another and the name *latipes* Pennant is an available name, that name and not the substitute name *variegatus* Leach should be regarded as the name of the type species of the genus concerned.

3. The investigations undertaken prior to the submission of the proposals referred to in paragraph 1 above had not disclosed the existence of any senior synonym of the name *latipes* Pennant, 1777, and it was concluded therefore that, when rendering *Opinion* 73, the Commission had been correct in concluding that the name *latipes* Pennant was the oldest available name for the species concerned. In those proposals it was therefore recommended that the name *latipes* Pennant should be placed on the *Official List of Specific Names in Zoology* and that its junior objective synonym *variegatus* Leach should be placed on the corresponding *Official Index*. At this point Dr. L. B. Holthuis informed me that the name *depurator* Linnaeus, 1758, as published in the combination *Cancer depurator*, properly applied to the same species as did the name *latipes* Pennant, though, as he explained, the name *depurator* Linnaeus had for many years been applied, and was still applied, to an entirely different species. Dr. Holthuis added that very serious confusion would result if the name *depurator* Linnaeus were to be transferred to the species now known as *latipes* Pennant and that, in conjunction with other interested specialists, he had in mind the submission to the Commission of proposals designed to prevent this transfer from being required. The information so received made it evident that the Commission could not take a decision on the question whether the name *latipes* Pennant, 1777, as the specific name of the type species of *Portumnus* Leach, should be placed on the *Official List* until a decision had been reached on the question whether the name *depurator* Linnaeus should in future be applied to the species now known as *latipes* Pennant. I accordingly at once withdrew the proposals which I had submitted in regard to the name *latipes* Pennant and its junior objective synonym *variegatus* Leach, pending a decision being reached by the Commission in regard to the name *depurator* Linnaeus. At the same time I informed Dr. Holthuis that I very much hoped that it would be possible for him to submit to the Commission at an early date his proposals in regard to the name *depurator* Linnaeus.

4. Now that Dr. Holthuis's proposal has been received, I warmly support his request for a decision as to the name to be accepted as the oldest available name for the type species of the genus *Portumnus* Leach, for, as the name *Portumnus* has been placed on the *Official List of Generic Names in Zoology*, a decision on this matter must be taken before the *Official List* can be published in book-form.

PROPOSED ADDITION TO THE "OFFICIAL LIST OF GENERIC NAMES IN ZOOLOGY" OF THE NAMES OF TWENTY-FIVE GENERA OF MACRURA REPTANTIA (CLASS CRUSTACEA, ORDER DECAPODA), INCLUDING PROPOSALS FOR THE USE OF THE PLENARY POWERS (a) TO VALIDATE THE SPELLING "CHERAX" AS THE VALID ORIGINAL SPELLING FOR THE GENERIC NAME PUBLISHED AS "CHERAX" AND "CHERAPS" BY ERICHSON IN 1846, (b) TO SUPPRESS THE SPECIFIC NAME "GOUDOTII" GUÉRIN-MÉNEVILLE, 1839, AS PUBLISHED IN THE COMBINATION "ASTACOIDES GOUDOTII", AND (c) TO VALIDATE THE EMENDATION TO "PALINURUS" OF THE GENERIC NAME "PALLINURUS" WEBER, 1795

By L. B. HOLTHUIS

(*Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands*)

(Commission Reference : Z.N.(S.) 1039)

I submit herewith to the International Commission on Zoological Nomenclature a list of the names of twenty-five genera of Macrura Reptantia for addition to the *Official List of Generic Names in Zoology*. Each of these names is an available name in the sense that it is not a homonym of any generic name previously published for a genus in the Animal Kingdom. All these names are currently used in carcinological literature and have been used for the last twenty-five years at the least. The validity of only one of these names has ever been questioned. This one case is dealt with in paragraph 4 below. Except for the two cases dealt with in paragraphs 3 and 5 below, the spelling of the names adopted here is the Valid Original Spelling. The species indicated here as the type species of the genera enumerated in paragraph 9, have been duly determined as such under Article 30 of the *Règles Internationales de la Nomenclature Zoologique*. For each generic name the gender is indicated. The following seven cases need some special comment :—

2. *Astacoides* Guérin-Ménéville, 1839. The type species of this genus was described almost simultaneously by (a) Guérin-Ménéville and (b) by H. Milne Edwards and Audouin. In both cases the type specimens were collected by a M. Goudot in Madagascar, and they possibly originally belonged to the same lot. Guérin-Ménéville, who named the species *Astacoides goudotii*, published its description on page 109 of the April number of the *Revue zoologique* for the year 1839, a periodical which was published monthly. H. Milne Edwards & Audouin published a short description of the same species in *L'Institut* ((sect. 1) 7 (280) : 152), under the name *Astacus madagascarensis*. This number of *L'Institut*, which is a weekly periodical, bears the date "9 mai 1839",

which confidently may be accepted as the date of publication. The April number of *Revue zoologique* contains (on page 119) a report of the session of April 29 of the "Académie royale des sciences de Paris", and consequently must have been published after that date. Since this same April number was offered by Guérin-Ménéville to the Académie des Sciences in their session of 13th May 1839 (cf. *C. R. Acad. Sci.*, Paris 8 : 766)* the date of publication of that number lies between April 29 and May 13, 1839; the fact that this number was not offered to the Academy in their session of May 6 is an indication that the day of issue lies somewhere between the 6th and 13th May 1839. Even this narrowing down of the date of publication to one week does not solve the present question, since *Astacus madagascarensis* was published in the same week (9th May 1839). With the available evidence the date of publication of the name *Astacoides goudotii* Guérin-Ménéville must be accepted as 13th May 1839, since this is the earliest date on which it is certain that the publication of that name had occurred. The specific name *goudotii* therefore is a junior subjective synonym of the name *madagascarensis* and must give way to the latter name. This agrees quite well with the practice adopted by carcinologists, since after 1839 practically all authors have used the specific name *madagascarensis* or (sometimes) its invalid emendation *madagascariensis* (first published as *Astacus madagascariensis* Audouin & Milne Edwards (H.), 1841, *Arch. Mus. Hist. nat. Paris* 2 : 35) and rejected the name *goudotii*. However, as additional evidence eventually may be forthcoming, giving a more exact date of publication of *Astacoides goudotii*, and as the possibility exists that this date actually falls before the date of publication of the name *Astacus madagascarensis*, it seems best to set all doubts as to the priority of the latter name at rest by suppressing the former under the Plenary Powers of the Commission.

3. *Cherax* Erichson, 1846. In the publication containing the original description of this genus Erichson (1846, *Arch. Naturgesch.* 12(1) : 86-103) used two different spellings for its name. On pages 88 and 89 the spelling *Cherax* is employed four times, while on page 101 the spelling *Cheraps* is used twice. According to the Rule formulated at the Copenhagen Congress, "where there was more than one Original Spelling and in the case of none of these spellings was there clear evidence that it was the result of an inadvertent error, the *Valid Original Spelling* is that one of the Original Spellings used by the *First Subsequent User* of the name" (Hemming, 1953, *Copenhagen Decisions zool. Nomencl.* : 43, 44). In the present case the First Subsequent User was Erichson himself, who in an addendum to his above cited paper (1846, *Arch. Naturgesch.* 12(1) : 375-377) on pages 376 and 377 used the spelling *Cheraps*

* It is stated in these *Comptes Rendus* that the Academy received during their session of 13th May "Revue zoologique; par le même [=Guérin-Ménéville]; 1839, in-8°". Though the actual number of the *Revue zoologique* received at this session is not specially indicated here, it is evident that the April number (number 4) is meant, since Guérin offered No. 1 (the January number) of his *Revue* to the Academy in their session of 4th February 1839 (cf. *C. R. Acad. Sci.*, Paris 8 : 180), No. 2 (the February number) in the session of 11th March (cf. *C. R. Acad. Sci.*, Paris 8 : 366), No. 3 (the March number) in the session of 1st April 1839 (cf. *C. R. Acad. Sci.*, Paris 8 : 502).

twice. *Cheraps* therefore is the nomenclatorially correct name for the genus discussed here. Up to 1936 this spelling was used by ten of the sixteen authors dealing with this genus, while three authors used the Invalid Subsequent Spelling *Chaeraps* (first published by Huxley, [1879], *Proc. zool. Soc. Lond.* 1878 : 752, 755, 764, 767-771, 775, 776, 786). I know of no-one in the period up to 1936 who used the spelling *Cherax*, apart from Erichson himself. In 1936, however, Clark (1936, *Mem. nat. Mus. Victoria* 10 : 19) adopted the spelling *Cherax* because this was the spelling first used by Erichson in his original paper. Since Clark's publication is a monographic treatment of the Australian freshwater crayfishes and contains a revision of the genus *Cherax*, it has been consulted by practically all subsequent workers in this group and her nomenclature has been generally adopted. Of the nine authors publishing on this genus since 1936, six used the spelling *Cherax*, two that of *Cheraps*. In 1949 Holthuis (*Nova Guinea* (n.s.) 5 : 299) in a revision of the New Guinea species of the genus in question also came to the conclusion that the spelling *Cherax* was to be preferred to that of *Cheraps*, though his reasons were different from those given by Clark. Holthuis, basing himself on the Principle of the First Reviser, pointed out that the first publication in which both the spellings *Cherax* and *Cheraps* were mentioned and in which one of these was selected as the correct spelling, is Schulze, Kükenthal, Heider & Hesse's (1927) *Nomencl. Anim. Gen. Subgen.* (2 : 649), where behind the word *Cheraps* the indication "pro *Cherax*" is given. Since during the Copenhagen Congress the Principle of the First Subsequent User, and not that of the First Reviser was adopted, the spelling *Cherax* employed by Clark and Holthuis proves to be incorrect, that of *Cheraps* being correct. However, as in modern carcinological literature the spelling *Cherax* has become generally accepted, it would seem senseless to switch back to *Cheraps*, thereby causing a new confusion. Therefore the International Commission on Zoological Nomenclature is asked here to use its Plenary Powers to validate the spelling *Cherax* as the Valid Original Spelling and to suppress the spelling *Cheraps*.

4. *Linuparus* White, 1847 (spelling) : This generic name is an anagram of the name *Palinurus* and evidently for that reason was rejected by Ortmann (1891, *Zool. Jb. Syst.* 6 : 21) who proposed the new name *Avus* for it. In a later publication Ortmann (1897, *Amer. J. Sci.* (4) 4 : 290) admitted his error and accepted White's name. Very few authors have followed Ortmann (1891) in the use of the name *Avus*, which now is completely forgotten.

5. *Palinurus* Weber, 1795 (spelling) : Before Rathbun's (1904, *Proc. biol. Soc. Wash.* 17 : 169-172) rediscovery of Weber's (1795) *Nomenclator Entomologicus*, the present genus was always referred to as *Palinurus* Fabricius, 1798, and its name spelled with one "l". The genera *Pallinurus* Weber, 1795, and *Palinurus* Fabricius, 1798, are objective synonyms as both have the same type species. The generic name *Pallinurus* Weber, being the older of the two, has priority and under the *Règles* ought to be used. As, however, the spelling *Palinurus* has been consistently employed by practically every carcinologist

from 1798 to the present day (even Miss Rathbun's discovery of Weber's *Nomenclator* did not cause any noticeable difference here) it would be very awkward to change the spelling to *Pallinurus*. This is the more true since the name *Pallinurus* has, as far as I am aware, no sensible meaning, while *Palinurus* is the name of a mythological figure, viz., the steersman of Aeneas's ship. The Commission is therefore asked to use its Plenary Powers to approve the emendation of the spelling of the generic name *Pallinurus* Weber, 1795, to *Palinurus*.

6. *Palinurus* Weber, 1795 (name for type species): The synonymy of the type species of this genus, *Astacus elephas* Fabricius, 1787 (*Mant. Ins.* 1 : 331), is rather complicated. Fabricius's original description of this species and his reference to the, then still unpublished, figure by Herbst leave not the least doubt as to its identity. Its place of occurrence was, however, incorrectly given as "Habitat in Americae meridionalis Insulis", for the species concerned, the European Spiny Lobster, is known only from the eastern Atlantic, the British Isles to the Mediterranean and N.W. Africa. For no apparent reason both Weber (1795, *Nomencl. Ent.* : 94) and Fabricius himself (1798, *Suppl. Ent. syst.* : 401) substituted the specific name *quadricornis* for that of *elephas*, while in 1804 Latreille (*Ann. Mus. Hist. nat.*, Paris, 3 : 391) replaced the name *quadricornis* by that of *vulgaris*. The name *Palinurus vulgaris* Latreille, 1804, has been adopted by most subsequent authors who dealt with the European Spiny Lobster. Apart from the fact that this name is a junior objective synonym of the names *Astacus elephas* Fabricius, 1787, *Pallinurus quadricornis* Weber, 1795, and *Palinurus quadricornis* Fabricius, 1798, it is furthermore a junior homonym of *Palinurus vulgaris* Latreille, [1802-1803] (*Hist. nat. gén. part. Crust. Ins.* 6 : 191), which itself is a substitute name for, and thereby a junior objective synonym of, *Cancer homarus* Linnaeus, 1758 (*Syst. Nat.* (ed. 10) 1 : 633). The latter species is an Indo-West Pacific spiny lobster which in modern literature is indicated with the name *Panulirus homarus* (Linnaeus). Though the name *Palinurus vulgaris* has been much used, it seems best in this case to follow the normal provisions of the *Règles* here and to place the correct name *elephas* Fabricius on the *Official List of Specific Names in Zoology*, the more so since this name has been adopted by several modern authors.

7. *Parribacus* Dana, 1852 : The original description of the type species of this genus, *Scyllarus antarcticus*, was published in 1793 by Lund (*Skr. Naturh. Selsk. Kbh.* 2(2) : 22). In the same year this same species was described by Herbst, 1793 (*Versuch Naturgesch. Krabben Krebse* 2(3) : 82) under the name *Cancer (Astacus) ursus major*. The available evidence is not sufficient to permit of a decision on the question as to which of these two names was published first. The Principle of the First Subsequent Reviser has to be adopted in order to find out which of the two names should be used, for under the *Règles* the above names rank for priority as from the same day, i.e. 31st December 1793, the earliest date as from which each of these names is known to have been published. As pointed out by Holthuis, 1946 (*Temminckia* 7 : 104) the First

Subsequent Reviser here is Milne Edwards (H.), 1837 (*Hist. nat. Crust.* 2 : 287, 288) who selected the name *antarcticus* for the present species. This specific name, which is far more widely used than that of *ursusmajor*, is now submitted for insertion in the *Official List*. In the synonymy of *Scyllarus antarcticus*, Lund (1793) cited four authors: "Seba Mus. 3. Tab. 20. fig. 1. Rumph. Mus. Tab. 2. fig. C. Marcgraf H. Brasiliae p. 186. Johnston. exsangv. Tab. 9. fig. 14." The first two of these references (namely those to Seba and Rumphius) are cited also by Herbst (1793) in the synonymy of *Cancer (Astacus) ursusmajor*. As the lectotype for both *Scyllarus antarcticus* Lund, 1793, and *Cancer (Astacus) ursusmajor* Herbst, 1793, I now select the specimen figured on plate 2 fig. C of Rumphius's (1705) *Amboinsche Rariteitkamer*. By this action *Scyllarus antarcticus* Lund, 1793, and *Cancer (Astacus) ursusmajor* Herbst, 1793, become objective synonyms. It is now proposed that the specific name *ursusmajor* Herbst, as the junior of these two names, should be placed on the *Official Index of Rejected and Invalid Specific Names in Zoology*.

8. *Scyllarus* Fabricius, 1775 : The type species of this genus is (by monotypy) *Cancer arctus* Linnaeus, 1758 (*Syst. Nat.* (ed. 10) 1 : 633). The original description of that species runs as follows :

C[ancer] macrourus, thorace subaculeato hirtio, manibus adaetylis.

Marcgr. bras. 186. Poliquiquixe.

Jonst. exsangv. t. 4. f. 3, 4, 8, 12.

Barrel. rar. t. 1288. f. 2.

Rumph. mus. t. 2. f. C. D.

Brown. jam. t. 41. f. 1.

Habitat in M. Europae, Asiae, Africae, Americae.

Linnaeus's definition of this species is so vague that it would fit any Scyllarid and indeed many other Crustacea. The literature referred to by Linnaeus deals with five different species of SCYLLARIDAE : Marcgraf's animal, like that figured by Rumphius in his fig. C, belongs to the species known at present as *Parribacus antarcticus* (Lund), Jonston's figs. 4 and 12 represent *Scyllarides latus* (Latreille), his figs. 3 and 8 show the species that at present is generally known as *Scyllarus arctus* (L.). The latter species is also figured by Barrelier. Rumphius's fig. D is made from a specimen of *Thenus orientalis* (Lund), while Browne figured a specimen of *Scyllarides aequinoctialis* (Lund). *Cancer arctus* Linnaeus, 1758, is therefore a composite species. To fix the identity of that species in harmony with current usage, I here select as the lectotype of *Cancer arctus* Linnaeus, 1758, the specimen figured in fig. 8 of pl. III of J. Jonstonus's (1650) *Historiae Naturalis de Exanguibus aquaticis Libri IV*, which figure also may be found in the later (1657 and 1767) editions of Jonston's work and in its

1660 Dutch translation. In all these editions it is shown as pl. III fig. 8. Comparing Jonston's figure with those given in older publications it becomes evident that this figure is not original, but is a copy of a figure published by Gesner (1558, *Hist. Anim.* 4 : 1087), which itself again is copied from Rondelet's (1554, *Libri Pisc. mar.* : 546) excellent figure of the species. Rondelet's specimen thus is the actual type specimen of the species. Herbst (1793, *Versuch Naturgesch. Krabben Krebse* 2(3) : 83) described the present species under the name *Cancer (Astacus) ursus-minor* and cited with the synonymy: "Sulzer Gesch. der Ins. tab. 32. Fig. 3. *Gesner nomenclat. aquatil.* p. 217. *Ursaminor. Rondelet. Squilla caelata.*" Gesner's figure is a copy of that by Rondelet, which as pointed out above is the original figure of the type specimen of *Cancer arctus* Linnaeus. I now select Rondelet's specimen as the type specimen of *Cancer (Astacus) ursus-minor* Herbst, 1793, making thereby Herbst's species a junior objective synonym of *Cancer arctus* Linnaeus, 1758.

9. The following list contains the required particulars regarding the twenty-five generic names, which it is now recommended should be placed on the *Official List of Generic Names in Zoology* :—

- Astacoides** (masculine) Guérin-Ménéville, 1839, *Rev. zool.* 2 : 109 (type species, by monotypy: **Astacoides goudotii** Guérin-Ménéville, 6–13 May 1839, *Rev. zool.* 2 : 109 [Note (not for inclusion in the *Official List*): This name is a junior subjective synonym of *Astacus madagascarensis* Milne Edwards (H.) & Audouin, 9 May 1839, *L'Institut* (sect. 1) 7(280) : 152])
- Astacopsis** (masculine) Huxley, [1879], *Proc. zool. Lond.* 1878 : 760, 764 (type species, by monotypy: **Astacus franklinii** Gray (J.E.), 1845, in Eyre *J. Exped. Discov. centr. Australia* 1 : 409)
- Cambarellus** (masculine) Ortmann, 1905, *Proc. Amer. phil. Soc.* 44 : 97, 106 (type species, by original designation: **Cambarus montezumae** De Saussure, 1857, *Rev. Mag. Zool.* (2) 9 : 102)
- Cambarus** (masculine) Erichson, 1846, *Arch. Naturgesch.* 12(1) : 88, 89, 95 (type species, by selection by Faxon, 1898 (*Proc. U.S. Nat. Mus.* 20 : 644) : **Astacus bartonii** Fabricius, 1798, *Suppl. Ent. syst.* : 407)
- Cherax** (masculine) Erichson, 1846, *Arch. Naturgesch.* 12(1) : 88, 89 (type species by monotypy: **Astacus (Cheraps) preissii** Erichson, 1846, *Arch. Naturgesch.* 12(1) : 101 [Note (not for inclusion in the *Official List*): This name is a junior subjective synonym of *Astacus bicarinatus* Gray (J.E.), 1845, in Eyre *J. Exped. Discov. centr. Australia* 1 : 410])
- Engaeus** (masculine) Erichson, 1846, *Arch. Naturgesch.* 12(1) : 88, 89, 102 (type species, by selection by Clark (1936, *Mem. Nat. Mus. Victoria* 10 : 37) : **Astacus (Engaeus) fossor** Erichson, 1846, *Arch. Naturgesch.* 12(1) : 102)

- Enoplometopus** (masculine) A. Milne Edwards, 1862, *Ann. Sci. nat. Zool.* (4) 17 : 362 (type species, by monotypy : **Enoplometopus pictus** Milne Edwards (A.), 1862, *Ann. Sci. nat. Zool.* (4) 17 : 362)
- Ibacus** (masculine) Leach, 1815, *Zool. Miscell.* 2 : 151 (type species, by monotypy : **Ibacus peronii** Leach, 1815, *Zool. Miscell.* 2 : 152)
- Linuparus** (masculine) White, 1847, *List Crust. Brit. Mus.* : 70 (type species, by monotypy : **Palinurus trigonus** von Siebold, 1824, *Hist. nat. japon.* : 15)
- Nephropsis** (masculine) Wood-Mason, 1872, *Proc. asiat. Soc. Bengal* 1872 : 151 (type species, by monotypy : **Nephropsis stewarti** Wood-Mason, 1872, *Proc. asiat. Soc. Bengal* 1872 : 151)
- Orconectes** (masculine) Cope, 1872, *Amer. Nat.* 6 : 409, 410, 416, 417, 419 (type species, by selection by Fowler (1912, *Ann. Rep. New Jersey State Mus.* 1911 : 339) : **Orconectes inermis** Cope, 1872, *Amer. Nat.* 6 : 409, 410, 419 [Note (not for inclusion in the *Official List*) : This name is a junior subjective synonym of *Astacus pellucidus* Tellkamp, 1844, *Arch. Anat. Phys. wiss. Medic.* 1844 : 383])
- Palinurellus** (masculine) von Martens, 1878, *S. B. Ges. naturf. Freunde Berlin* 1878 : 131 (type species, by monotypy : **Palinurellus gundlachi** von Martens, 1878, *S. B. Ges. naturf. Freunde Berlin* 1878 : 131)
- Palinurus** Weber, 1795, *Nomencl. Entomol. ent. Syst. Fabr.* : 94 (type species, by monotypy : **Astacus elephas** Fabricius, 1787, *Mant. Ins.* 1 : 331)
- Palinustus** (masculine) Milne Edwards (A.), 1880, *Bull. Mus. comp. Zool.* 8 : 66 (type species, by monotypy : **Palinustus truncatus** Milne Edwards (A.), 1880, *Bull. Mus. comp. Zool.* 8 : 66)
- Paracambarus** (masculine) Ortmann, 1906, *Proc. Wash. Acad. Sci.* 8 : 1 (type species, by monotypy : **Cambarus** (**Paracambarus**) **paradoxus** Ortmann, 1906, *Proc. Wash. Acad. Sci.* 8 : 1, 3)
- Paranephrops** (masculine) White, 1842, Gray's *Zool. Miscell.* (5) : 78 (type species, by monotypy : **Paranephrops planifrons** White, 1842, Gray's *Zool. Miscell.* (5) : 79)
- Parastacus** (masculine) Huxley, [1879], *Proc. zool. Soc. Lond.* 1878 : 759, 771 (type species, by selection by Faxon (1898, *Proc. U.S. nat. Mus.* 20 : 683) : **Astacus pilimanus** von Martens, 1869, *Arch. Naturgesch.* 35(1) : 15)

- Parribacus** (masculine) Dana, 1852, *Proc. Acad. nat. Sci. Philad.* 6 : 14 (type species, by selection in paragraph 7 of the present application : **Scyllarus antarcticus** Lund, 1793, *Skr. naturhist. Selsk. Kbh.* 2(2) : 22), as defined by the lectotype selected in paragraph 7 above
- Polycheles** (masculine) Heller, 1862, *S.B. Akad. Wiss. Wien* 45(1) : 389 (type species, by monotypy : **Polycheles typhlops** Heller, 1862, *S.B. Akad. Wiss. Wien* 45(1) : 392)
- Procambarus** (masculine) Ortmann, 1905, *Ann. Carnegie Mus.* 3(3) : 435, 437 (type species, by selection by Fowler (1912, *Ann. Rep. New Jersey State Mus.* 1011 : 340) : **Cambarus digueti** Bouvier, 1897, *Bull. Mus. Hist. nat., Paris* 3 : 227)
- Puerulus** (masculine) Ortmann, 1897, *Amer. J. Sci.* (4) 4 : 290 (substitute name for *Puer* Ortmann, 1891, *Zool. Jb. Syst.* 6 : 15, 37, a junior homonym of *Puer* Lefebvre, 1842, *Mag. Zool.* (2) 4 : expl. pl. 92) (type species, by selection by Calman (1909, *Ann. Mag. nat. Hist.* (8) 3 : 442) : **Panulirus angulatus** Bate, 1888, *Rep. Voy. Challenger Zool.* 24 : 81)
- Scyllarus** (masculine) Fabricius, 1775, *Syst. Ent.* : 413 (type species, by monotypy : **Cancer arctus** Linnaeus, 1758, *Syst. Nat.* (ed. 10) 1 : 633), as defined by the lectotype selected in paragraph 8 of the present application
- Thaumastocheles** (masculine) Wood-Mason, 1874, *Proc. asiat. Soc. Bengal* 1874 : 181 (type species, by monotypy : **Astacus zaleucus** Thomson, 1873, *Nature*, Lond. 8 : 246, 247)
- Thenus** (masculine) Leach, 1815, *Trans. linn. Soc. Lond.* 11 : 335, 338 (type species, by monotypy : **Thenus indicus** Leach, 1815, *Trans. linn. Soc. Lond.* 11 : 338 [Note (not for inclusion in the *Official List*) : This name is a junior subjective synonym of *Scyllarus orientalis* Lund, 1793, *Skr. naturhist. Selsk. Kbh.* 2(2) : 22])
- Willemoesia** (feminine) Grote, 1873, *Nature*, Lond. 8 : 485 (substitute name for *Deidamia* von Willemoes-Suhm in Thomson, 1873, *Nature*, Lond. 8 : 51, a junior homonym of *Deidamia* Clemens, 1859, *J. Acad. nat. Sci. Philad.* (2) 4 : 137) (type species, by monotypy : **Deidamia leptodactyla** von Willemoes-Suhm in Thomson, 1873, *Nature*, Lond. 8 : 51).

10. It is recommended that the specific names of the type species of the genera specified in paragraph 9 above should be placed on the *Official List of Specific Names in Zoology*, in as far as these names are available names and at the same time are the oldest such names for the species concerned. The following list gives in the first column the specific names which fulfil the conditions mentioned above. In the second column is given the original combination

in which these names were used. In column (3) is given the name of the genus of which the species cited in column (1) is the type species.

Specific Name	Original Combination in which the name cited in Col. (1) was published	Genus of which the species cited in Col. (1) is the type species
(1)	(2)	(3)
<i>angulatus</i> Bate, 1888	<i>Panulirus angulatus</i>	<i>Puerulus</i> Ortmann, 1897
<i>antarcticus</i> Lund, 1793*	<i>Scyllarus antarcticus</i>	<i>Parribacus</i> Dana, 1852
<i>arctus</i> Linnaeus, 1758†	<i>Cancer arctus</i>	<i>Scyllarus</i> Fabricius, 1775
<i>bartonii</i> Fabricius, 1798	<i>Astacus bartonii</i>	<i>Cambarus</i> Erichson, 1846
<i>digueti</i> Bouvier, 1897	<i>Cambarus digueti</i>	<i>Procambarus</i> Ortmann, 1905
<i>elephas</i> Fabricius, 1787	<i>Astacus elephas</i>	<i>Palinurus</i> Weber, 1795
<i>fossor</i> Erichson, 1846	<i>Astacus (Engaeus) fossor</i>	<i>Engaeus</i> Erichson, 1846
<i>franklinii</i> Gray, 1845	<i>Astacus franklinii</i>	<i>Astacopsis</i> Huxley, [1879]
<i>gundlachi</i> von Martens, 1878	<i>Palinurellus gundlachi</i>	<i>Palinurellus</i> von Martens, 1878
<i>leptodactyla</i> von Willemoes-Suhm, 1873	<i>Deidamia leptodactyla</i>	<i>Willemoesia</i> Grote, 1873
<i>montezumae</i> de Saussure, 1857	<i>Cambarus montezumae</i>	<i>Cambarellus</i> Ortmann, 1905
<i>paradoxus</i> Ortmann, 1906	<i>Cambarus (Paracam- barus) paradoxus</i>	<i>Paracambarus</i> Ortmann, 1906
<i>peronii</i> Leach, 1815	<i>Ibacus peronii</i>	<i>Ibacus</i> Leach, 1815
<i>pictus</i> Milne Edwards (A.), 1862	<i>Enoplometopus pictus</i>	<i>Enoplometopus</i> Milne Edwards (A.), 1862
<i>pilimanus</i> von Martens, 1869	<i>Astacus pilimanus</i>	<i>Parastacus</i> Huxley, [1879]
<i>planifrons</i> White, 1842	<i>Paranephrops planifrons</i>	<i>Paranephrops</i> White, 1842
<i>stewarti</i> Wood-Mason, 1872	<i>Nephropsis stewarti</i>	<i>Nephropsis</i> Wood-Mason, 1872
<i>trigonus</i> von Siebold, 1824	<i>Palinurus trigonus</i>	<i>Linuparus</i> White, 1847
<i>truncatus</i> Milne Edwards (A.), 1880	<i>Palinustus truncatus</i>	<i>Palinustus</i> Milne Ed- wards (A.), 1880
<i>typhlops</i> Heller, 1862	<i>Polycheles typhlops</i>	<i>Polycheles</i> Heller, 1862
<i>zaleucus</i> Thomson, 1873	<i>Astacus zaleucus</i>	<i>Thaumastocheles</i> Wood- Mason, 1874

* As defined by the lectotype selected in paragraph 7 of the present application.

† As defined by the lectotype selected in paragraph 8 of the present application.

11. In the case of four of the genera enumerated in paragraph 9 of the present application, the name of the nominal species, which is the type species of the genus concerned is not accepted by specialists as the oldest available name for the taxonomic species represented by the nominal species in question. These cases are :—

Name of the genus	Name of the nominal species which is the type species of the genus specified in the first column	Oldest available name for the species specified in the second column
(1)	(2)	(3)
<i>Astacoides</i> Guérin-Méneville, 1839	<i>Astacoides goudotii</i> Guérin-Méneville, 1839	<i>Astacus madagascarensis</i> Milne Edwards (H.) & Audouin, 1839
<i>Cherax</i> Erichson, 1846	<i>Astacus (Cheraps) preissii</i> Erichson, 1846	<i>Astacus bicarinatus</i> Gray, 1845
<i>Orconectes</i> Cope, 1872	<i>Orconectes inermis</i> Cope, 1872	<i>Astacus pellucidus</i> Tellkamp, 1844
<i>Thenus</i> Leach, 1815	<i>Thenus indicus</i> Leach, 1815	<i>Scyllarus orientalis</i> Lund, 1793

12. The concrete proposals which I now submit for consideration are that the Commission should :—

(1) use its Plenary Powers :—

- (a) to validate the spelling *Cherax* as the Valid Original Spelling for the generic name published with the spellings *Cherax* and *Cheraps* by Erichson in 1846 ;
- (b) to validate the emendation *Palinurus* of the generic name originally published as *Pallinurus* by Weber in 1795 ;
- (c) to suppress for the purposes of the Law of Priority but not for those of the Law of Homonymy the specific name *goudotii* Guérin-Méneville, 1839, as published in the combination *Astacoides goudotii* ;

(2) place on the *Official List of Generic Names in Zoology* the twenty-five generic names enumerated in paragraph 9 of the present application with the particulars there specified ;

(3) place on the *Official List of Specific Names in Zoology* :—

- (a) the twenty-one specific names specified in Column (1) in paragraph 10 of the present application ;

- (b) the specific names of the four nominal species listed in Column (3) in paragraph 11 of the present application ;
- (4) place the under-mentioned generic names on the *Official Index of Rejected and Invalid Generic Names in Zoology* :—
- (a) *Arctus* De Haan, 1849 in von Siebold, *Fauna japon.*, Crust. (6, 7) : xx, 238 (type species, by tautonymy : *Cancer arctus* Linnaeus, 1758, *Syst. Nat.* (ed. 10) 1 : 633) (a junior objective synonym of *Scyllarus* Fabricius, 1775) ;
- (b) *Arctus* Dana, 1852, *Proc. Acad. nat. Sci. Philad.* 6 : 14, 19 (type species, by tautonymy : *Cancer arctus* Linnaeus, 1758, *Syst. Nat.* (ed. 10) 1 : 633) (a junior homonym, and a junior objective synonym, of *Arctus* De Haan, 1849, and a junior objective synonym of *Scyllarus* Fabricius, 1775) ;
- (c) *Avus* Ortmann, 1891, *Zool. Jb. Syst.* 6 : 15, 21 (type species, by monotypy : *Palinurus trigonus* von Siebold, 1824, *Hist. nat. Japon.* : 15) (a junior objective synonym of *Linuparus* White, 1847) ;
- (d) *Bartoniuss* Ortmann, 1905, *Proc. Amer. phil. Soc.* 44 : 97, 117 (type species, by original designation : *Astacus bartonii* Fabricius, 1798, *Suppl. Ent. syst.* : 407) (a junior objective synonym of *Cambarus* Erichson, 1846) ;
- (e) *Chaeraps* Huxley, [1879], *Proc. zool. Soc. Lond.* 1878 : 752, 755, 764, 767–771, 775, 776, 786 (an Erroneous Subsequent Spelling of *Cherax* Erichson, 1846) ;
- (f) *Cheraps* Erichson, 1846, *Arch. Naturgesch.* 12(1) : 101 (an Invalid Original Spelling of *Cherax* Erichson, 1846) ;
- (g) *Deidamia* von Willemoes-Suhm in Thomson, 1873, *Nature*, Lond. 8 : 51 (a junior homonym of *Deidamia* Clemens, 1859) ;
- (h) *Palinurus* Fabricius, 1798, *Suppl. Ent. syst.* : 376, 400 (type species, by selection by Latreille (1810, *Consid. gén. Ordre nat. Crust. Arachn. Ins.* : 422) : *Palinurus quadricornis* Fabricius, 1798, *Suppl. Ent. syst.* : 401, which is a junior objective synonym of *Astacus elephas* Fabricius, 1787, *Mant. Ins.* 1 : 331) (a junior objective synonym and junior homonym of *Palinurus* Weber, 1795) ;
- (i) *Palinurus* De Kay, 1842, *Zool. New York* 4 : 118 (type species, by monotypy : *Coryphaena perciformis* Mitchell, 1818, *Amer. mon. Mag.* 2(4) : 244) (a junior homonym of *Palinurus* Weber, 1795) ;
- (j) *Pallinurus* Weber, 1795, *Nomencl. Entomol.* : 94 (an Invalid Original Spelling of *Palinurus* Weber, 1795) ;

- (k) *Polycheles* Brady & Robertson, 1870, *Ann. Mag. nat. Hist.* (4) 6 : 25 (type species, by monotypy : *Polycheles stevensoni* Brady & Robertson, 1870, *Ann. Mag. nat. Hist.* (4) 6 : 25) (a junior homonym of *Polycheles* Heller, 1862) ;
- (l) *Puer* Ortmann, 1891, *Zool. Jb. Syst.* 6 : 15, 37 (a junior homonym of *Puer* Lefebvre, 1842, *Mag. Zool.* (2) 4 : expl. pl. 92) ;
- (5) place on the *Official Index of Rejected and Invalid Specific Names in Zoology* the under-mentioned names :—
- (a) *goudotii* Guérin-Ménéville, 1839, as published in the combination *Astacoides goudotii*, and suppressed under the Plenary Powers under (1)(c) above ;
- (b) *incisus* (Péron MS.) Leach, 1815, *Zool. Misc.* 2 : 151, as published in the combination *Scyllarus incisus* (a junior objective synonym of *peronii* Leach, 1815, as published in the combination *Ibacus peronii*) ;
- (c) *madagascariensis* Audouin & Milne Edwards (H.), 1841, *Arch. Mus. Hist. nat. Paris* 2 : 35, as published in the combination *Astacus madagascariensis* (an Erroneous Subsequent Spelling of *madagascarensis* Milne Edwards (H.) & Audouin, 1839, as published in the combination *Astacus madagascarensis*) ;
- (d) *quadricornis* Weber, 1795, *Nomencl. Ent. Syst. Fabr.* : 94, as published in the combination *Pallinurus quadricornis* (a junior objective synonym of *elephas* Fabricius, 1787, as published in the combination *Astacus elephas*) ;
- (e) *quadricornis* Fabricius, 1798, *Suppl. Ent. Syst.* : 401, as published in the combination *Palinurus quadricornis* (a junior objective synonym of *elephas* Fabricius, 1787, as published in the combination *Astacus elephas*, and a junior homonym, and a junior objective synonym of *quadricornis* Weber, 1795, as published in the combination *Pallinurus quadricornis*) ;
- (f) *ursus* Dana, 1852, *Proc. Acad. nat. Sci. Philad.* 6 : 14, as published in the combination *Arctus ursus* (a junior objective synonym of *arctus* Linnaeus, 1758 as published in the combination *Cancer arctus*) ;
- (g) *ursusmajor* Herbst, 1793, *Versuch Naturgesch. Krabben Krebse* 2(3) : 82, as published in the combination *Cancer (Astacus) ursus-major* and as defined by the lectotype selected in paragraph 7 of the present application (a junior objective synonym of *antarcticus* Lund, 1793, as published in the combination *Scyllarus antarcticus*) ;
- (h) *ursusminor* Herbst, 1793, *Versuch Naturgesch. Krabben Krebse* 2(3) : 83, as published in the combination *Cancer (Astacus)*

ursus-minor and as defined by the lectotype selected in paragraph 8 of the present application (a junior objective synonym of *arctus* Linnaeus, 1758, as published in the combination *Cancer arctus*);

- (i) *vulgaris* Latreille, [1802–1803], *Hist. nat. gén. part. Crust. Ins.* 6 : 191, as published in the combination *Palinurus vulgaris* (a junior objective synonym of *homarus* Linnaeus, 1758, *Syst. Nat.* (ed. 10) 1 : 633, as published in the combination *Cancer homarus*);
 - (j) *vulgaris* Latreille, 1804, *Ann. Mus. Hist. nat.*, Paris, 3 : 391, as published in the combination *Palinurus vulgaris* (a junior objective synonym of *elephas* Fabricius, 1787, as published in the combination *Astacus elephas*, and a junior homonym of *vulgaris* Latreille, [1802–1803], as published in the combination *Palinurus vulgaris*);
- (6) place on the *Official List of Family-Group Names in Zoology* the under-mentioned names :—
- (a) CAMBARINAE Hobbs, 1942, *Univ. Florida Publ.* (Biol. Ser.) 3(2) : 23 (type genus : *Cambarus* Erichson, 1846);
 - (b) PALINURIDAE (correction by Samouelle (1819, *Entomologists' useful Compendium* : 92) of PALINURINI (published as the name for a family)) Latreille, [1802–1803], *Hist. nat. gén. part. Crust. Ins.* 3 : 31 : (type genus : *Palinurus* Weber, 1795);
 - (c) PARASTACIDAE Huxley, [1879], *Proc. zool. Soc. Lond.* 1878 : 771, 775 (type genus : *Parastacus* Huxley, [1879]);
 - (d) POLYCHELIDAE Wood-Mason, 1874, *Proc. asiat. Soc. Bengal* 1874 : 180 (type genus : *Polycheles* Heller, 1862);
 - (e) SCYLLARIDAE (correction by White (1847, *List. Crust. Brit. Mus.* : 67) of SCYLLARIDES) Latreille, 1825, *Fam. nat. Regn. anim.* : 278 (type genus : *Scyllarus* Fabricius, 1775).
- (7) place on the *Official Index of Rejected and Invalid Family-Group Names in Zoology* the under-mentioned names :—
- (a) PALINURINI Latreille, [1802–1803] (an Invalid Original Spelling for PALINURIDAE) (cf. (6)(b) above);
 - (b) SCYLLARIDES Latreille, 1825 (an Invalid Original Spelling for SCYLLARIDAE) (cf. (6)(e) above).

**PROPOSED SUPPRESSION UNDER THE PLENARY POWERS OF
THE SPECIFIC NAME " FEROX " GMELIN (S.G.), 1771, AS PUB-
LISHED IN THE COMBINATION " ACCIPITER FEROX " (CLASS
AVES) (APPLICATION SUBMITTED TO SECURE A CLARIFICATION
OF " OPINION " 67)**

By **FRANCIS HEMMING, C.M.G., C.B.E.,**

Secretary to the International Commission on Zoological Nomenclature

(Commission Reference : Z.N.(S.) 1052)

The purpose of the present application is to ask the International Commission on Zoological Nomenclature to use its Plenary Powers to suppress the specific name *ferox* Gmelin (S.G.), 1771 (*Nov. Comment. Acad. imp. Sci. petrop.* 15 : 442), as published in the combination *Accipiter ferox*, in order to provide an assured position for the specific name *gallicus* Gmelin (J.F.), 1788 (*in* Linnaeus, *Syst. Nat.* (ed. 13) 1(1) : 259), as published in the combination *Falco gallicus*, the specific name of the type species of *Circetus* Vieillot, 1816, a name which was placed on the *Official List of Generic Names in Zoology* by the Ruling given by the International Commission in *Opinion* 67 (1916, *Smithson. Publ.* 2409 : 177—182).

2. This matter is one of considerable urgency, for arrangements are now well advanced for the early publication of the *Official Lists* in book-form and the present is one of a relatively small number of cases where further action by the Commission is required before publication can take place.

3. The present case arises out of a General Directive issued by the Thirteenth International Congress of Zoology, Paris, 1948, which placed upon the International Commission the obligation (a) to enter on the *Official List of Specific Names in Zoology* the specific name of the type species of every genus, the name of which had prior to that date been placed on the *Official List of Generic Names in Zoology*, where that name was the oldest available such name for the species concerned and, (b) in other cases to place on the *Official List* whatever might be found to be the oldest available name for the species in question.

4. Towards the close of 1955 steps were taken by the International Commission to comply with the foregoing Directive in so far as it applied to the names of the type species of genera of birds which had been placed on the

Official List before the Paris Congress of 1948². At this point Professor Ernst Mayr drew attention to the fact that the specific name *gallicus* Gmelin, 1788, would remain threatened until the name *ferox* Gmelin, 1771, as published in the combination *Accipiter ferox*, had been placed on the *Official Index of Rejected and Invalid Specific Names in Zoology*. In this connection he recalled that he had discussed this name in a paper which he had communicated to the Office of the International Commission some three weeks earlier. For the purposes of the present application the portion of Professor Mayr's paper relating to the name *Accipiter ferox* Gmelin has been extracted and is annexed hereto. It will be seen from Professor Mayr's paper that in the period from 1934—1944 various authors attempted to identify the foregoing nominal species with *Falco gallicus* Gmelin and consequently sank *gallicus* Gmelin as a junior subjective synonym of *ferox* Gmelin but that since 1944 the nominal species *Accipiter ferox* Gmelin had been universally accepted as indeterminable, the name *ferox* Gmelin being therefore treated as a *nomen dubium*.

5. In the paper referred to above Professor Mayr, who was not at that time aware that the name *ferox* Gmelin affected an existing entry on the *Official List*, proposed that the names enumerated in it should be dealt with under the notification and challenge procedure laid down by the Copenhagen Congress for the purpose of providing a means for securing immediate provisional protection for names, to be followed after a considerable period of years either by automatic permanent protection or by submission to the International Commission for the purpose of securing such protection. For the reasons explained in paragraphs 2 and 3 above, this slow-moving procedure is inappropriate in the present case, since the question is one which must be determined promptly in order to permit of the addition to the *Official List of Specific Names in Zoology* of the name *gallicus* Gmelin, 1788, before the *Official List* volume is sent to be printed.

6. Accordingly, I now ask the International Commission :—

- (1) in the light of the information provided by Professor Mayr, to use its Plenary Powers to suppress the specific name *ferox* Gmelin (S.G.), 1771, as published in the combination *Accipiter ferox*, for the purposes of the Law of Priority but not for those of the Law of Homonymy ;
- (2) to place the specific name *gallicus* Gmelin (J.F.), 1788, as published in the combination *Falco gallicus* (specific name of type species of *Circaetus* Vieillot, 1816) on the *Official List of Specific Names in Zoology* ;
- (3) to place on the *Official Index of Rejected and Invalid Specific Names in Zoology* the specific name specified in (1) above, as there proposed to be suppressed under the Plenary Powers.

²The decisions taken by the International Commission in this matter have since been embodied in *Direction 43* (now in the press).

ANNEXE

Note on the specific name "ferox" Gmelin (S.G.), 1771, as published in the combination "Accipiter ferox"

(extract from a paper (Z.N.(S.) 1033) entitled "The Names of Nominal Species of Birds to be placed on the "Official Index of Rejected and Invalid Specific Names in Zoology")

By **ERNEST MAYR**

(*Museum of Comparative Zoology at Harvard College,
Cambridge, Massachusetts, U.S.A.*)

Accipiter ferox Gmelin

Accipiter ferox Gmelin (S.G.), 1771, *Novi. Comment. Acad. Petrop.* 15(1770) : 442, pl.X
"Astrachan"

This name has a chequered history. In the *Vögel pal. Fauna* (: 1115) Hartert uses it for the bird now called *Buteo rufinus* Cretzschmar. Hartert later realised that the name *ferox* was not applicable to this species (*op. cit.* : 1189) and it was discarded as unidentifiable. Claude Grant (1934, *Ibis* (13) 4 : 643) tried to show that the description of *Accipiter ferox* applied better to the Short-Toed Eagle (*Circus gallicus*) than to any other hawk and proposed to sink *gallicus* into the synonymy of *ferox*. This proposal was, for a while, accepted by several authors until Mayr showed (1944, *Emu* 43 : 302—304) that the original description of *Accipiter ferox* contains too many contradictions to be applied to the Short-Toed Eagle or any other hawk. This conclusion has since been adopted by Grant and all other recent authors and the name is now universally considered as indeterminate.

SUPPORT FOR DR. L. B. HOLTHUIS'S PROPOSALS RELATING TO
(a) THE SPECIFIC NAME "DEPURATOR", AS PUBLISHED IN THE
COMBINATION "CANCER DEPURATOR" AND (b) THE GENERIC
NAME "MAJA" LAMARCK, 1801 (CLASS CRUSTACEA, ORDER
DECAPODA)

By **ISOBEL GORDON**

(*British Museum (Natural History), London*)

Commission References : Z.N.(S.) 1031, Z.N.(S.) 1074

(For the proposals submitted see *Bull. zool. Nomencl.* 12 : 99—105, 123—128)

(Letter dated 20th February 1956)

I am in agreement with Dr. Holthuis's proposal to validate *depurator*, [*holsatus*] and *latipes* (his *Portumnus* proposal) (Z.N.(S.) 1031); I am also in agreement with his proposal to validate *Maja* Lamarck, 1801 (Z.N.(S.) 1074).

**PROPOSED USE OF THE PLENARY POWERS TO VALIDATE THE
GENERIC NAME "MAJA" LAMARCK, 1801 (CLASS
CRUSTACEA, ORDER DECAPODA), AND TO DESIGNATE A TYPE
SPECIES FOR THIS GENUS IN HARMONY WITH CURRENT
USAGE**

By **L. B. HOLTHUIS**

(*Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands*)

(Commission Reference : Z.N.(S.) 1074)

The present application concerns a well known and widely used name for a genus of crabs, which under the normal provisions of the International Rules of Zoological Nomenclature would have to be rejected, since it is invalid for two reasons. The use by the International Commission on Zoological Nomenclature of its Plenary Powers is requested in this case in order to make this name an available name and to prevent in this way a quite unnecessary piece of confusion.

2. When erecting the genus *Maja*, Lamarck (1801, *Syst. Anim. sans Vertèbr.* : 154) divided it in two sections. The first of these sections was identified by him with the genus *Inachus* Fabricius, 1798, the second with *Parthenope* Fabricius, 1798. In the second section Lamarck placed one species : *Maja longimana* (= *Cancer longimanus* Linnaeus, 1758, the type species of the genus *Parthenope* Weber, 1795). The first section of Lamarck's genus *Maja* also contained a single species, which he named *Maja eriocheles* (: 154). This name according to the references given by Lamarck was evidently intended as a substitute name for *Cancer maja* Linnaeus (1758, *Syst. Nat.* (ed. 10) 1 : 629), though the latter species was not mentioned by name. Lamarck gave the following references "Olivier, no. 105. Seba Mus. 3, t. 22, f. 1. Herbst. Cancr. p. 219, t. 15, f. 87". Both Olivier (1791, *Ency. méth. Hist. nat. Ins.* 6 : 175) under no. 105, and Herbst (1788, *Versuch Naturgesch. Krabben Krebse* 1(7) : 219, pl. 15, fig. 87) dealt with *Lithodes maja* (L.), which was called *Cancer maja* by them. Seba (1761, *Locupl. Rerum Nat. Thesaur.* 3 : 56, pl. 22, fig. 1) described and figured the same species under the (non-binominal) name *Cancer spinosus, maximus, orientalis*. During the Thirteenth International Congress of Zoology at Paris the decision was taken that where "a genus was established with no designated or indicated type species and one of the included nominal species had at that time either as its valid name or as a synonym a specific trivial name consisting of the same word as the generic name . . . it is immaterial for the purposes of Rule (d) in Article 30 whether the tautonymous specific . . . name was or was not cited in the original publication of the generic name" (1950, *Bull. zool. Nomencl.* 4 : 154). In accordance with this decision *Maja eriocheles* Lamarck, 1801, is at present the

type species by absolute tautonymy of the genus *Maja* Lamarck, 1801. The nominal species *Maja eriocheles* Lamarck, 1801, and *Cancer maja* Linnaeus, 1758, are objectively identical with one another and the name *eriocheles* Lamarck is invalid as a junior objective synonym of *maja* Linnaeus. The nominal species *Cancer maja* Linnaeus was renamed *Lithodes arctica* by Latreille in 1806 (*Gen. Crust. Ins.* 1 : 40), when that author established the genus *Lithodes* Latreille, 1806 (: 39). No other nominal species was placed in this genus by Latreille and accordingly the nominal species *Lithodes arctica* Latreille would have been its type species by monotypy, if it had not been for the fact that this nominal species is (as explained above) objectively identical with the older nominal species *Cancer maja* Linnaeus, 1758. In these circumstances the provisions of Declaration 21³ apply in this case and the type species of this genus by monotypy is therefore *Cancer maja* Linnaeus and not the later-established nominal species *Lithodes arctica* Latreille. It will be seen therefore that the nominal genera *Maja* Lamarck, 1801, and *Lithodes* Latreille, 1806, are objectively identical with one another and that the name *Lithodes* Latreille is invalid as a junior objective synonym of *Maja* Lamarck.

3. The species *Cancer squinado* Herbst (1788, *Versuch Naturgesch. Krabben Krebse* 1(7) : 214) is generally indicated as the type species of the genus *Maja* Lamarck, though neither this species nor any of the species considered to be congeneric with it, was actually included by Lamarck, 1801, in his genus *Maja*. It is clear therefore that, unless the International Commission takes action under its Plenary Powers, the name *Maja* cannot be used in the sense in which it is at present generally employed.

4. The second reason why *Maja* Lamarck, 1801, is an unavailable name is that it is a junior homonym of *Maia* Brisson (1760, *Ornithologie* 3 : 212). The latter name, given to a genus of birds, belongs to the much discussed group of generic names introduced by Brisson in his 1760 *Ornithologia sive Synopsis methodica sistens Avium Divisionem in Ordines*, a book which has been validated under the Plenary Powers of the International Commission on Zoological Nomenclature at the Thirteenth International Congress of Zoology held in Paris in 1948 (cf. *Direction* 16 published in 1955, *Ops. Decls. int. Comm. Zool. Nomencl.* 1(c) : 81—88).

5. The generic name *Maja* Lamarck, 1801, has been generally adopted in carcinological literature for about 150 years for the genus containing *Cancer squinado* Herbst, 1788. This genus occurs in European seas as well as in those of the Indo-West Pacific region. As is shown by the large number of vernacular names (e.g., Spinous Spider-crab, Araignée de mer, Meerspinne,

³ Declaration 21, which is based upon a proposal published in 1955 (*Bull. zool. Nomencl.* 11 : 112—113), is now in the press and will be published shortly as Part 11 in volume 12 of the *Opinions and Declarations Series*.

Cabras, Grancevola, etc.) the species of this genus are well known, this being mainly due to the fact that they grow to a considerable size and are edible. The importance of the genus furthermore is shown by the fact that it is the type genus of the very large family MAJIDAE.

6. Only two authors have attempted to replace the generic name *Maja* Lamarck, 1801. The first of these was Stebbing (1904, *Spolia zeylan.* 2(5) : 2) who proposed the new name *Mamaia* as a substitute name, Stebbing's reasons were given by him in 1908 (*Mar. Invest. S. Afr.* 4 : 22, 23) : "The genus *Maja*, with the alternative spelling *Maia*, was established by Lamarck in 1801 . . . nominally to include the two genera which Fabricius had called *Inachus* and *Parthenope* . . . As both *Inachus* and *Parthenope* are still valid, *Maia* on its author's own showing has no standing place, and by no stretching of accepted rules can it be applied to a genus which is distinct from both of them". Rathbun (1897, *Proc. biol. Soc. Wash.* 11 : 160) had already pointed out that *Maia* Brissou, 1760, was older than *Maja* Lamarck, 1801, but she took no action at that time. In 1904 (*Proc. biol. Soc. Wash.* 17 : 171) the same author advanced reasons identical with those of Stebbing ("If a later name be so defined as to be equal in extent to two or more previously published genera, it must be cancelled *in toto*") and rejected Lamarck's name, accepting Stebbing's *Mamaia* as a substitute. One year later, however, Rathbun (1905, *Proc. biol. Soc. Wash.* 18 : 73) pointed out that the name *Paramaija* De Haan (1837, *Fauna japon.*, *Crust.* (3) : pl. 24) was a senior subjective synonym of *Mamaia* Stebbing and consequently should be adopted. Stebbing (1905, *Proc. biol. Soc. Wash.* 18 : 157—160) tried to show that since the name *Paramaija* was published on a plate only, it had no standing and that consequently the name *Mamaia* was the only available name for the genus in question. Notwithstanding this extensive discussion showing that the name *Maja* Lamarck was invalid, most carcinologists continued to use that name, only very few following either Rathbun or Stebbing.

7. Opinion 10 (1910, *Smithson. Publ.* 1938 : 15, 16 ; reissue in 1945 ; *Ops. Decls. int. Comm. zool. Nomencl.* 1(19) : 171—178) showed that the main presumption on which Stebbing and Rathbun had based their rejection of the name *Maja* Lamarck was false. This led Rathbun (1925, *Bull. U.S. nat. Mus.* 129 : 10) to restore Lamarck's name, but Stebbing continued to use the name *Mamaia*. As far as I know, Barnard in his 1950 monograph of the South African Decapoda (*Ann. S. Afr. Mus.* 38 : 58, 59) is the only author who follows Stebbing, while in the papers of practically all other carcinologists the name *Maja* Lamarck is employed, e.g., in Bouvier's (1940, *Faune de France* 37 : 319) treatment of the Decapoda Reptantia of France, in Zariquiey's (1946, *Publ. Biol. Medit. Inst. Esp. Est. Medit.* 2 : 168) handbook of the Spanish Mediterranean Decapoda, in Sakai's 1938 *Studies on the Crabs of Japan* (3 : 296), and in Balss's (1929, *Denkschr. Akad. Wiss. Wien* 102 : 16, 17) important paper on the classification of the Oxyrhyncha. In fact the rejection of this

name would greatly upset carcinological nomenclature, while its validation would mean an important step towards the stabilization of nomenclature in this group.

8. The generic name *Maia* Brisson, 1760, is not at present in regular use. It is not even mentioned, for example, in most Nomenclators or, when mentioned, is indicated there in parentheses only. The acceptance of this name would cause a severe confusion as it would have to replace either the generic name *Lonchura* Sykes, 1832, or *Munia* Hodgson, 1836, both of which are of long standing and at present are used by most ornithologists (information kindly furnished by Dr. G. C. A. Junge, curator of birds of the Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands). The suppression of the generic name *Maia* Brisson, 1760, therefore will be in the interest of the stability of both ornithological and carcinological nomenclature.

9. There is some diversity in the spelling adopted for the generic name *Maja* Lamarck, 1801, the spelling variants *Maia* and *Maïa* being often found in the literature. On p. 154 of Lamarck's original work the Latin name is three times given as *Maja*, the French vernacular name being spelled *Maia* (p. 154) and *Maïa* (p. 418 and in the table facing p. 143). The spelling *Maïa* however, also occurs on p. 428 in the Latin index ("Table des noms latins"). The latter spelling of the Latin name probably is a lapsus, but this does not alter the fact that there now are two different original spellings: *Maja* and *Maïa*. The First Subsequent User of the generic name was Bosc (1801—1802, *Hist. nat. Crust.* 1 : 245) who employed the spelling *Maja* consistently for both the Latin and the vernacular name, the word *Maja* being used more than 100 times in his book. There can therefore be no doubt that *Maja* is the Valid Original Spelling of the generic name discussed here.

10. The action that is here proposed in connection with the generic name *Maja* Lamarck, 1801, has the further advantage that it makes the generic name *Lithodes* Latreille, 1806, an available name. Since this latter name is the oldest available name for its genus and is universally employed by carcinologists, it is desirable that the present opportunity should be taken to place it on the *Official List of Generic Names in Zoology*.

11. The nominal genus *Maja* Lamarck, 1801, is, as has already been noted (paragraph 5) the type genus of the large family MAJIDAE. This nominal family was established in 1819 (*Entomologists' useful Compendium* : 88) by Samouelle, who, however, misspelled the name as MALADAE. This spelling was corrected to MAJIDAE by Richters in 1880 (Möbius's *Beitr. Meeresf. Maurit. Seych.* : 141). The genus *Lithodes* Latreille, 1806, is also the type genus of a family, namely the family LITHODIDAE. This nominal family was also established in 1819 by Samouelle (*ibid.* : 90), who misspelled the name

LITHODIADAE. This spelling was corrected to LITHODIDAE by Dana in 1853 (*U.S. Explor. Exped.* 13(2) : 1430).

12. The concrete proposals which I now submit for consideration are that the International Commission on Zoological Nomenclature should :—

(1) use its Plenary Powers :—

- (a) to suppress both for the purposes of the Law of Homonymy and for those of the Law of Priority the generic name *Maia* Brisson, 1760 (Class Aves) for the purposes of validating the generic name *Maja* Lamarck, 1801 (Class Crustacea) ;
- (b) to set aside all designations or selections of type species for the genus *Maja* Lamarck, 1801, made prior to the Ruling now asked for and, having done so, to designate *Cancer squinado* Herbst, 1788, as the type of that genus ;

(2) place the under-mentioned names on the *Official List of Generic Names in Zoology* :—

- (a) *Lithodes* Latreille, 1806 (gender : masculine) (type species by monotypy : *Cancer maja* Linnaeus, 1758) ;
- (b) *Maja* Lamarck, 1801 (gender : feminine) (type species by designation under the Plenary Powers under (1)(b) above : *Cancer squinado* Herbst, 1788) ;

(3) place on the *Official List of Specific Names in Zoology* the under-mentioned names :—

- (a) *maja* Linnaeus, 1758, as published in the combination *Cancer maja* ;
- (b) *squinado* Herbst, 1788, as published in the combination *Cancer squinado* ;

(4) place on the *Official Index of Rejected and Invalid Generic Names in Zoology* the under-mentioned names :—

- (a) *Maia* Brisson, 1760, as suppressed under (1)(a) above ;
- (b) *Maia* Lamarck, 1801 (an Invalid Original Spelling of the generic name *Maja* Lamarck, 1801) ;
- (c) *Mamaia* Stebbing, 1904 (a junior objective synonym of *Maja* Lamarck, 1801) ;

(5) place on the *Official Index of Rejected and Invalid Specific Names in Zoology* the under-mentioned names :—

- (a) *arctica* Latreille, 1806 (*Gen. Crust. Ins.* 1 : 40) as published in the combination *Lithodes arctica* (a substitute name for, and thereby a junior objective synonym of *maja* Linnaeus, 1758, as published in the combination *Cancer maja*) ;
- (b) *eriocheles* Lamarck, 1801, as published in the combination *Maja eriocheles* (a substitute name for, and thereby a junior objective synonym of, *maja* Linnaeus, 1758, as published in the combination *Cancer maja*) ;

(6) place on the *Official List of Family-Group Names in Zoology* the under-mentioned names :—

- (a) LITHODIDAE (correction of LITHODIADAE) Samouelle, 1819 (type genus : *Lithodes* Latreille, 1806) ;
- (b) MAJIDAE (correction of MAĪADAE) Samouelle, 1819 (type genus : *Maja* Lamarck, 1801).

(7) place on the *Official Index of Rejected and Invalid Family-Group Names in Zoology* :—

- (a) LITHODIADAE Samouelle, 1819 (an Invalid Original Spelling for LITHODIDAE) ;
- (b) MAĪADAE Samouelle, 1819 (an Invalid Original Spelling for MAJIDAE).

13. The recommendations submitted in the present application have been the subject of consultations with, and are supported by, the following specialists : (a) Dr. J. Forest (*Muséum National d'Histoire Naturelle, Paris*) ; (b) Dr. I. Gordon (*British Museum (Natural History), London*) ; (c) Dr. Th. Monod (*Institut d'Afrique Noire, Dakar*) ; (d) Dr. R. Zariquiey (*Barcelona, Spain*).



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24 JUL 1956
PURCHASED

THE BULLETIN OF ZOOLOGICAL NOMENCLATURE

The Official Organ of
**THE INTERNATIONAL COMMISSION ON
ZOOLOGICAL NOMENCLATURE**

Edited by
FRANCIS HEMMING, C.M.G., C.B.E.

Secretary to the International Commission on Zoological Nomenclature

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BULLETIN OF ZOOLOGICAL NOMENCLATURE

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20th July 1956

NOTICES PRESCRIBED BY THE INTERNATIONAL CONGRESS OF ZOOLOGY

The following notices are given in pursuance of decisions taken, on the recommendation of the International Commission on Zoological Nomenclature (see 1950, *Bull. zool. Nomencl.* 4 : 51—56, 57—59), by the Thirteenth International Congress of Zoology, Paris, July 1948 (see 1950, *Bull. zool. Nomencl.* 5 : 5—13, 131).

(a) Date of commencement by the International Commission on Zoological Nomenclature of voting on applications published in the "Bulletin of Zoological Nomenclature"

NOTICE is hereby given that normally the International Commission will start to vote upon applications published in the *Bulletin of Zoological Nomenclature* on the expiry of a period of six calendar months from the date of publication in the *Bulletin* of the applications in question. Any specialist who may desire to comment upon any of the applications published in the present Part (Vol. 12, Part 5) of the *Bulletin* is accordingly invited to do so in writing to the Secretary to the Commission, as quickly as possible and in any case, in sufficient time to enable the communication in question to reach the Secretariat of the Commission before the expiry of the six-month period referred to above.

(b) Notice of the possible use by the International Commission on Zoological Nomenclature of its Plenary Powers in certain cases

NOTICE is hereby given that the possible use by the International Commission on Zoological Nomenclature of its Plenary Powers is involved in applications published in the present Part of the *Bulletin of Zoological Nomenclature* in relation to the under-mentioned names :—

- (1) *Sao* Barrande, 1846, validation of ; *Elleipsocephalus* Zenker, 1833, emendation of, to *Ellipsocephalus*, validation of (Class Crustacea, Order Stomatopoda) (Z.N.(S.) 666) ;
- (2) *Heteralocha* Cabanis, [1851], validation of (Class Aves) (Z.N.(S.) 720) ;

Notices prescribed by the International Congress of Zoology (*continued*)

- (3) *Acrodytes* Fitzinger, 1843, *venulosa* Laurenti, 1768 (*Rana*) and *tibiatrix* Laurenti, 1768 (*Hyla*), suppression of (Class Amphibia, Order Salientia) (Z.N.(S.) 771);
- (4) *Palaeophoneus* Lindström and Thorell, 1884, emendation of, to *Palaeophonus*, validation of (Class Arachnida) (Z.N.(S.) 1010);
- (5) *Actinocrinus gilbertsoni* Phillips, 1836, interpretation of, by neotype (Class Crinoidea) (Z.N.(S.) 1057);

2. Comments received in sufficient time will be published in the *Bulletin*: other comments, provided that they are received within the prescribed period of six calendar months from the date of publication of the present Part will be laid before the International Commission on Zoological Nomenclature at the time of commencement of voting on the application concerned.

3. In accordance with the procedure agreed upon at the Session held by the International Commission on Zoological Nomenclature in Paris in 1948 (see 1950, *Bull. zool. Nomencl.* 4 : 56), corresponding Notices have been sent to the serial publications *Nature* and *Science*.

FRANCIS HEMMING

*Secretary to the International Commission on
Zoological Nomenclature*

28 Park Village East, Regent's Park,
LONDON, N.W.1, England.

20th July 1956.

PROPOSED VALIDATION UNDER THE PLENARY POWERS
OF THE GENERIC NAME "SAO" BARRANDE, 1846 (CLASS
TRILOBITA)

By CHRISTIAN POULSEN

(Universitetets Mineralogisk-Geologiske Institut,
Mineralogisk Museum, Copenhagen, Denmark)

(Commission's reference : Z.N.(S.) 666)

The purpose of the present application is to ask the International Commission on Zoological Nomenclature to use its Plenary Powers for the purpose of validating the long-familiar generic name *Sao* Barrande, 1846 (Class Trilobita). That this generic name is technically invalid has long been known, but owing to the special importance of this genus no attempt has ever been made to replace it by some other name. Nor is the project that the Commission should be asked to validate the name *Sao* Barrande a new one, for already during the recent war Rudolf Richter in a paper entitled "*Nomina conservanda* : Antrag auf Aufhebung der 'Regeln' zu Gunsten von *Sao* Barrande 1846" (1941, *Senckenbergiana* 23 : 291-293) recommended the adoption of this course.

2. The age of the genus *Sao* Barrande is Middle Cambrian and the genus is of exceptional importance since it represents the most classical case of the developmental history of a trilobite species. The work on trilobites published in 1852 (*Syst. Silur. Bohême*) in which Barrande published his conclusions in regard to this genus was a pioneer study of its kind and was based upon material which was exceptional both for its state of preservation and for its completeness from the early protaspid stage to the adult. The figures given by Barrande are widely reproduced in general text-books both of zoology and palaeontology. It would be little short of a disaster if this historic name were to be cast aside for the sake of some narrow nomenclatorial technicality. The history of this case is set out in the following paragraphs.

3. The nominal genus *Sao* was established by Barrande in 1846 (*Not. prél. Silur.* : 13) with the species *Sao hirsuta* Barrande, 1846 (*ibid.* : 13) as type species by monotypy. At this early date Barrande did not fully appreciate the character of this species and in the same paper he described other specimens of it under the new generic and specific names *Monadina distincta* (: 19), while to another specimen he gave a third new specific name *nanus* (: 12), placing the species so named in the genus *Ellipsocephalus* (emend. of *Elleipsocephalus*) Zenker, 1833 (*Beitr. Nat. Umwelt* : 51).

4. The status of *Sao* Barrande is not adversely affected by the existence of the older name *Elleipsocephalus* Zenker, 1833, for the type species of that genus does not even belong to the same family as the genus *Sao*. The type species by monotypy of this genus is *Elleipsocephalus ambiguus* Zenker (: 51), which ever since Emmrich (1839, *De Trilobitis*: 44) has been subjectively identified with *Trilobites hoffi* Schlotheim, 1823 (*Petrefactenk. Nachtr.* 2 : 30). Emmrich (: 17) was the first author also to emend to *Ellipsocephalus* the defective original spelling *Elleipsocephalus* and this emendation completely replaced the original spelling. As part of the general settlement now proposed this generic name in its emended spelling should be placed on the *Official List of Generic Names in Zoology*. This genus is the type genus of the well-established family ELLIPSOCEPHALIDAE Matthew (G.F.), 1887 (*Trans. R. Soc. Canada* 5 (sect. 4) : 128). This name should now be placed on the *Official List of Family-Group Names in Zoology*.

5. The generic name *Monadina* applied by Barrande to a specimen of *S. hirsuta* Barrande at the same time that the nominal genus *Sao* was established (paragraph 3 above) is a subjective synonym of the latter name. Accordingly, as the names *Sao* and *Monadina* were published in the same book and on the same date, the relative precedence to be accorded to them is, under the *Règles* (1953, *Copenhagen Decisions zool. Nomencl.* : 66-67, Decisions 123-124) through the application of the "First Reviser" Rule. The name *Monadina* was treated by Barrande in 1852 as a junior synonym of *Sao* and it has been similarly treated by subsequent authors. It is not clear, however, that Barrande's action constituted a formal choice in favour of *Sao* as against *Monadina* under the foregoing Rule. Accordingly, in order to set at rest any possible doubts on this subject, I here select the name *Sao* under the "First Reviser" Rule to take precedence over the name *Monadina*.

6. The next author to deal with the species to which Barrande in 1846 had given the name *Sao hirsuta* was Corda in Hawle & Corda in 1847 in his paper entitled *Prodrom einer Monographie der böhmischen Trilobiten* (: 1-116). In this paper Corda completely misunderstood the material before him and erected no less than ten new nominal genera and eighteen new nominal species on the basis of specimens of Barrande's *hirsuta*. With two exceptions these names are subjective synonyms only and as such do not fall within the scope of the present application. The two exceptions are:—(1) *Staurogmus* Corda, 1847 (*ibid.* : 28), a substitute name for *Sao* Barrande, 1846; (2) *muricatus* Corda, 1847 (*ibid.* : 28), as published in the combination *Staurogmus muricatus*, a substitute name for *hirsuta* Barrande, 1846, as published in the combination *Sao hirsuta*.

7. Up till 1955 the genus *Sao* Barrande was placed in various families, including the family SOLENOPLEURIDAE and the family PTYCHOPARIDAE. In the most recent treatment of this group Hupé in his *Classification des*

Trilobites (Ann. Paléont. 41 : 130) has however erected the family-group taxon SAOIDAE for this taxon.

8. The technical defect which at present renders the name *Sao* Barrande, 1846, invalid is that that name is a junior homonym of *Sao* Billberg, 1820 (Enum. Ins. Mus. Billberg. : 135). Reference to the copy of this rare work in the library of the British Museum (Natural History) shows that *Sao* Billberg is the name of a monotypical genus having as its type species by monotypy the nominal species *Cancer mantis* Linnaeus, 1758 (Syst. Nat. (ed. 10) 1 : 633) (Class Crustacea, Order Stomatopoda). By the Ruling given by the Commission under its Plenary Powers in *Opinion* 186 (1945, Ops. Decs. int. Comm. zool. Nomencl. 3 : 53-64) the above species was designated as the type species of the genus *Squilla* Fabricius, 1787, of which therefore the name *Sao* Billberg, 1820, is a junior objective synonym. It will thus be seen that from the point of view of carcinologists there cannot be the slightest objection to the suppression of the name *Sao* Billberg by the Commission under its Plenary Powers, while, as already explained, such action would be of the greatest possible value to workers on Trilobites. The generic name *Squilla* Fabricius, 1787, was placed on the *Official List of Generic Names in Zoology* by the Ruling given in *Opinion* 186, while the name *mantis* Linnaeus, 1758, as published in the combination *Cancer mantis* was placed on the *Official List of Specific Names in Zoology* by the Ruling given in *Direction* 1 (1954, Ops. Decs. int. Comm. zool. Nomencl. 3(30) : 401-416). No action therefore requires to be taken in regard to either of these names.

9. It must be noted also that Billberg placed his genus *Sao* in a suprageneric taxon of family-group rank (the category concerned being styled by Billberg as a "Natio"), to which he gave the name SAONIDES. Until recently the existence of a family-group name based upon the generic name *Sao* Billberg in Crustacea would have given rise to a troublesome problem of homonymy in relation to the family-group name in Trilobita based upon the generic name *Sao* Barrande. Fortunately, however, no difficulty need be anticipated under this head, for under a *Declaration* (*Declaration* 20) recently adopted by the Commission (1955, Ops. Decs. int. Comm. zool. Nomencl. 10(19) : i-viii) it has been ruled that, where the name of a genus which is the type genus of a taxon of the family-group is suppressed by the Commission under its Plenary Powers, the decision so taken is to apply equally to the family-group name based on the generic name in question. Accordingly, if the Commission grants the present application for the suppression of the generic name *Sao* Billberg, that decision will automatically carry with it a decision similarly to suppress the family-group name SAOIDAE (correction of SAONIDES) Billberg, 1820.

10. In addition to the senior homonym *Sao* Billberg, 1820, discussed in the immediately preceding paragraph, there is also a junior homonym *Sao* Adams (H.), 1854 (*Gen. rec. Moll.* 2 : 21), a name applied to a genus of Mollusca (Class Gastropoda). This name was replaced by the name *Pyrunculus*

by Pilsbry in 1895 (*in* Tryon & Pilsbry, *Man. Conch.* (1) 15 : 181, 229). The type species of this genus by original designation is *Bulla (Atya) pyriformis* Adams (A.), 1850 (*Thes. Conch.* 2 : 589). As part of the general settlement of the *Sao* problem now proposed, the name *Sao* Adams should be placed on the *Official Index of Rejected and Invalid Generic Names in Zoology* and the other names mentioned above should be placed on the appropriate *Official Lists*. Neither *Sao* Adams nor *Pyrunculus* Pilsbry have been taken as the base for a family-group name, the genus being currently placed in the family RETUSIDÆ.

11. For the reasons set forth in the present application the International Commission on Zoological Nomenclature is asked :—

(1) to use its Plenary Powers :—

- (a) to suppress the generic name *Sao* Billberg, 1820 (Class Crustacea, Order Stomatopoda) for the purposes both of the Law of Priority and of the Law of Homonymy ;
- (b) to approve the emendation *Ellipsocephalus* (published by Emmrich (H.F.) in 1839 and since generally adopted) of the generic name *Elleipsocephalus* Zenker, 1833 (Class Trilobita) ;

(2) to place the under-mentioned generic names on the *Official List of Generic Names in Zoology* :—

- (a) *Sao* Barrande, 1846, as validated under the Plenary Powers under (1)(a) above (gender : feminine) (type species, by monotypy : *Sao hirsuta* Barrande, 1846) (Class Trilobita) ;
- (b) *Ellipsocephalus* (emend. under the Plenary Powers under (1)(b) above of *Elleipsocephalus*) Zenker, 1833 (gender: masculine) (type species, by monotypy : *Ellipsocephalus* (emend. of *Elleipsocephalus*) *ambiguus* Zenker, 1833) [Note not for inclusion in the "Official List" : The name *ambiguus* Zenker, 1833, as published in the above combination is currently regarded as a junior subjective synonym of *hoffii* Schlotheim, 1823, as published in the combination *Trilobites hoffii*.] (Class Trilobita) ;
- (c) *Pyrunculus* Pilsbry, 1895 (gender : masculine) (type species, by original designation : *Bulla (Atya) pyriformis* Adams (A.), 1850 [Note : The name *Pyrunculus* Adams is a *nom. nov. pro* the invalid name *Sao* Adams, 1854, referred to in (4)(2) below.] (Class Gastropoda) ;

(3) to place the under-mentioned specific names on the *Official List of Specific Names in Zoology* :—

- (a) *hirsuta* Barrande, 1846, as published in the combination *Sao hirsuta* (specific name of type species of *Sao* Barrande, 1846) ;

- (b) *hoffii* Schlotheim, 1823, as published in the combination *Trilobites hoffii*;
 - (c) *pyriformis* Adams (A.), 1850, as published in the combination *Bulla (Atya) pyriformis* (specific name of type species of *Pyrunculus* Pilsbry, 1895);
- (4) to place the under-mentioned generic names on the *Official Index of Rejected and Invalid Generic Names in Zoology* :—
- (a) *Sao* Billberg, 1820, as suppressed under the Plenary Powers under (1)(a) above;
 - (b) *Sao* Adams (H.), 1854 (a junior homonym of *Sao* Barrande, 1846);
 - (c) *Elleipsocephalus* Zenker, 1833 (an Invalid Original Spelling for *Ellipsocephalus* rejected under the Plenary Powers under (1)(b) above);
 - (d) *Staurogmus* Corda in Hawle & Corda, 1847 (a junior objective synonym of *Sao* Barrande, 1846);
- (5) to place the under-mentioned specific name on the *Official Index of Rejected and Invalid Specific Names in Zoology* :—*muricatus* Corda in Hawle & Corda, 1847, as published in the combination *Staurogmus muricatus* (a junior objective synonym of *hirsuta* Barrande, 1846, as published in the combination *Sao hirsuta*);
- (6) to place the under-mentioned family-group names on the *Official List of Family-Group Names in Zoology* :—
- (a) SAOIDAE Hupé, 1955 (type genus : *Sao* Barrande, 1846);
 - (b) ELLIPSOCEPHALIDAE Matthew (G.F.), 1887 (type genus : *Ellipsocephalus* (emend. of *Elleipsocephalus*) Zenker, 1833);
- (7) to place the under-mentioned family-group names on the *Official Index of Rejected and Invalid Family-Group Names in Zoology* :—
- (a) SAOIDAE (correction of SAONIDES) Billberg, 1820 (type genus : *Sao* Billberg, 1820) (automatically suppressed under the Plenary Powers through *Declaration 20* consequent upon the suppression under the above Powers of the generic name *Sao* Billberg, 1820, under (1)(a) above);
 - (b) SAONIDES Billberg, 1820 (type genus : *Sao* Billberg, 1820) (an Invalid Original Spelling for SAOIDAE).

REQUEST FOR A RULING AS TO THE SPECIES TO BE ACCEPTED AS
THE TYPE SPECIES OF THE GENERA "CULTER" AND "NASUS"
BASILEWSKY, 1855 (CLASS PISCES)

By GEORGE S. MYERS

(Natural History Museum, Stanford University, Stanford, California, U.S.A.)

(Commission's reference : Z.N.(S.) 273)

The purpose of the present application is to ask the International Commission to give a ruling on the question of the species to be accepted as the type species of the genera *Culter* Basilewsky, 1855 and *Nasus* Basilewsky, 1855 (Class Pisces). The facts of this case are set out briefly in the following paragraphs.

2. The genus *Culter* Basilewsky, 1855 (*Nouv. Mém. Soc. imp. Nat. Moscou* 10 : 236) was established for six new nominal species to which Basilewsky gave the names *alburnus* (: 236), *erythropterus*, *mongolicus*, *pekinensis*, *exiguus* and *leucisculus*. Basilewsky did not specify any of these species as the type species of this genus, but in a line by itself directly below the generic name and before mentioning any of the new species included in this genus, he wrote "*(Cypr. cultratus* Linn.)". The first author to select a type species under Rule (g) in Article 30 was Bleeker who in 1863 (*Atlas ichthyol. Indes orient. néerland.* 3 : 33) so selected *Culter alburnus* Basilewsky, 1855.

3. Bleeker's type selection was accepted by all subsequent authors up to 1938, though Jordan (1919, *Genera of Fishes* 2 : 262), in accepting *alburnus* as the type species, added the comment :—"Basilewsky plainly intended to make his type *Cyprinus cultratus*". In 1938, however, Dr. Hugh M. Smith (*J. Wash. Acad. Sci.* 28(9) : 407-411) advanced the view that Basilewsky himself designated *Cyprinus cultratus* Linnaeus, 1758 (*Syst. Nat.* (ed. 10) 1 : 326) as the type species of the genus *Culter* at the time when he first published that generic name. Dr. Smith put forward this thesis as follows :—

In setting up *Culter alburnus* as the type of *Culter*, Bleeker and various writers who agreed with him in this course entirely ignored the fact that Basilewsky himself adopted or considered *Cyprinus cultratus* as the type of *Culter*. No other interpretation can be placed on the circumstances that, immediately after the first use of the word *Culter*, Basilewsky devoted a whole line to the words "*Cypr. cultratus* Linn.". The case is clearly

covered by the International Rules of Zoological Nomenclature, reference being made particularly to article 30, paragraph *g*, reading :

“ If an author, in publishing a genus with more than one valid species, fails to designate or to indicate its type, any subsequent author may select the type.”

That Basilewsky did select a type species by “ indication ” seems to be fully established by the international rules and the opinions thereunder, and Bleeker's action was void.

4. Smith's reference to Rule (g) in Article 30 is clearly beside the mark, for that Rule refers only to the selection of a type species of a genus for which no type species was designated or indicated by the original author at the time of the first publication of the generic name concerned. If any case is to be advanced in favour of the view that Basilewsky designated a type species for the genus *Culter*, it must be an argument founded upon the interpretation of Rule (a) in Article 30, the Rule relating to the original designation of a type species by the author of a generic name. In the case of the selection of a type species by a subsequent author under Rule (g) there is a supplementary provision which was omitted by Smith in the extract quoted in his paper which is, however, very relevant in the present case. This provision reads as follows : “ The meaning of the expression ‘ select the type ’ is to be rigidly construed. Mention of a species as an illustration or example of a genus does not constitute a selection of a type.” Rule (a) (type species by original designation) does not contain a supplementary provision of this kind, but it has been the practice of zoologists to assume that the expression “ designate ” a type as used in Rule (a) should be construed as rigidly as the expression “ select ” a type as used in Rule (g). This principle seems to me to be correct and I notice that a proposal that this principle should be expressly written into Rule (a) has recently been submitted to the Commission (Hemming, 1954, *Bull. zool. Nomencl.* 9 : 188–190).

5. I think it quite clear therefore that Smith's attempt to bring forward *Cyprinus cultratus* Linnaeus as the type species of *Culter* Basilewsky was incorrect and that the valid type species of this genus is *Culter alburnus* Basilewsky, the species so selected by Bleeker in 1863. If Smith's conclusions had been correct, the generic name *Culter* Basilewsky would have fallen as a junior synonym of *Pelecus* Agassiz, [1836] (*Mém. Soc. Sci. nat. Neuchatel* 1 : 39). This would have been very unfortunate, for the name *Culter* has been used by all workers on Chinese fishes, e.g. Günther, Bleeker, Kner, Sauvage & Dabry, Berg, Nichols, Rendahl, Chu and others.

6. The generic name *Nasus* Basilewsky, 1855 (: 234) was published in a manner very similar to that in which the name *Culter* was introduced in the same paper, for, in addition to species expressly included in this genus—in this case, the single new species *Nasus dahuricus*—Basilewsky devoted the

line immediately following the generic name *Nasus* to the entry "(Cypr. nasus Linn.)". It is very doubtful whether Basilewsky recognised—or was even aware of—the principle embodied nearly fifty years later in Rule (d) in Article 30 under which, where no type species is designated or indicated by monotypy for a genus and where one of the included species bears a specific name consisting of the same word as the generic name, the species bearing that name becomes the type species of the genus by absolute tautonymy. However, as *Cyprinus nasus* Linnaeus, 1758 (*Syst. Nat.* (ed. 10) 1 : 325) was certainly included by Basilewsky in his genus *Nasus* and as Basilewsky (i) did not expressly designate a type species, (ii) did not include in the genus a species bearing the specific name *typus* or *typicus* and (iii) included more than one species in the genus, Rule (d) (type species by absolute tautonymy) applies automatically in this case, thus making *Cyprinus nasus* Linnaeus the type species. In this case no difficulty arises, for this species is currently accepted as the type species of *Nasus* Basilewsky.

7. No family-group-name problem arises in the present case, the genera concerned being currently referred to the family CYPRINIDAE.

8. In order finally to dispose of this matter, I now ask the International Commission :—

- (1) to rule that the type species of the genus *Culter* Basilewsky, 1855, was first validly determined when in 1863 Bleeker selected *Culter alburnus* Basilewsky, 1855, to be the type species of this genus (selection made under Rule (g) in Article 30) ;
- (2) to place the under-mentioned generic names on the *Official List of Generic Names in Zoology* :—
 - (a) *Culter* Basilewsky, 1855 (gender : masculine) (type species, by selection by Bleeker (1863) : *Culter alburnus* Basilewsky, 1855) ;
 - (b) *Nasus* Basilewsky, 1855 (gender : masculine) (type species, by absolute tautonymy : *Cyprinus nasus* Linnaeus, 1758) ;
- (3) to place the under-mentioned specific names on the *Official List of Specific Names in Zoology* :—
 - (a) *alburnus* Basilewsky, 1855, as published in the combination *Culter alburnus* (specific name of type species of *Culter* Basilewsky, 1855) ;
 - (b) *nasus* Linnaeus, 1758, as published in the combination *Cyprinus nasus* (specific name of type species of *Nasus* Basilewsky, 1855).

**PROPOSED VALIDATION OF THE GENERIC NAME "HETERALOCHA"
CABANIS, [1851], FOR THE NEW ZEALAND HUIA (CLASS AVES)**

By **C. A. FLEMING**

(Department of Scientific and Industrial Research Wellington, New Zealand)

(Commission's reference : Z.N.(S.) 720)

The purpose of the present application is to ask the International Commission on Zoological Nomenclature to use its Plenary Powers to conserve the generic name *Heteralocha* Cabanis, [1851], for the New Zealand Huia (Class Aves). The facts of this case are set out in the following paragraphs.

2. Gould published the generic name *Neomorpha* twice in the year 1837. The first of these occasions was in January of that year (*Syn. Birds Austr.* (1) : pl. xi), the second in the month of June (*Proc. zool. Soc. Lond.* 4(48) : 144). In the *Synopsis* he applied this name to two new nominal species which he named *Neomorpha acutirostris* and *Neomorpha crassirostris* respectively. It was soon discovered that these nominal species represented the female and male respectively of the Huia, a New Zealand bird noted for the extreme sexual dimorphism of its bill. This species is now known by the specific name *acutirostris* Gould, the names *crassirostris* Gould, 1837 and *gouldi* Gould, 1841, *ex* Gray, being treated as junior synonyms.

3. In 1851 Cabanis proposed the new generic name *Heteralocha* (Cabanis, [1851], in Cabanis & Heine, *Mus. Hein.* 1 : 218) as a substitute for *Neomorpha* Gould, 1837, at the same time designating *Neomorpha acutirostris* Gould as type species.

4. Most subsequent authors have erroneously considered *Neomorpha* Gould, 1837, to be a junior homonym of *Neomorphus* Gloger, 1827 (*Notizen* (Froriep) 16 : 278), and the name *Heteralocha acutirostris* (Gould, 1837) has been in general use for the Huia since 1865 not only in ornithological literature but also in general works on biology.

5. Under Article 34 of the *Règles* as amended by the Fourteenth International Congress of Zoology, Copenhagen 1953 (1953, *Copenhagen Decisions zool. Nomencl.* : 78, Decision 152) the names *Neomorpha* Gould and *Neomorphus* Gloger are not homonyms of one another and in consequence the first of these names should now replace the name *Heteralocha* Cabanis. The name for the Huia would thus revert to *Neomorpha acutirostris* Gould.

6. It is submitted that the application of the normal provisions of the *Règles* would result in an undesirable change in the name of a well-known bird, which ought to be avoided. The name *Neomorpha* was used by Gould, Gray and others from 1837 to 1855 and in the present century by Mathews & Iredale (1913, *Ibis* 1913 : 451). *Heteralocha*, on the other hand, has been used in successive revisions of the New Zealand avifauna by Buller (1865 ; 1872 ; 1882 ; 1888 ; 1905), Finsch (1872, 1874, 1888), Bowdler-Sharpe (1875), Oliver (1930) and Mathews (1930 ; 1946). The name *Heteralocha* has also been widely used in general works.

7. As convenor of the Checklist Committee of the Ornithological Society of New Zealand, I am authorised to record the unanimous opinion of the Committee that stability in nomenclature would be better served by the retention of the name *Heteralocha* than by the re-introduction of the name *Neomorpha*.

8. No family-group-name problem arises in the present case, the genus *Heteralocha* Cabanis being placed either in the family CALLAEIDAE or in the family PHILESTURNIDAE.

9. In the light of the considerations set out in the present paper, I apply to the International Commission on Zoological Nomenclature :—

- (1) to use its Plenary Powers to suppress the under-mentioned generic name for the purposes of the Law of Priority but not for those of the Law of Homonymy :—*Neomorpha* Gould, 1837 ;
- (2) to place the under-mentioned generic name on the *Official List of Generic Names in Zoology* :—*Heteralocha* Cabanis, [1851] (gender : feminine) (type species, by original designation : *Neomorpha acutirostris* Gould, 1837) ;
- (3) to place the under-mentioned specific name on the *Official List of Specific Names in Zoology* :—*acutirostris* Gould, 1837, as published in the combination *Neomorpha acutirostris* (specific name of type species of *Heteralocha* Cabanis, [1851]) ;
- (4) to place on the *Official Index of Rejected and Invalid Generic Names in Zoology* the generic name specified in (1) above as there suppressed under the Plenary Powers.

**SUPPORT FOR DR. C. A. FLEMING'S PROPOSAL FOR THE VALIDATION
OF THE GENERIC NAME " HETERALOCHA " CABANIS, [1851] (CLASS AVES)**

(a) By **ERNST MAYR**

(*Museum of Comparative Zoology at Harvard College,
Cambridge, Massachusetts, U.S.A.*)

(Commission's reference : Z.N.(S.) 720)

(For the proposal submitted see 1956, *Bull. zool. Nomencl.* **12** : 139-140)

(Letter dated 27th October 1952)

I believe that the Ornithological Society of New Zealand has submitted a petition to the International Commission to place the name *Heteralocha* on the *Official List* of valid names, and to place the name *Neomorpha* on the *Official Index* of rejected names.

I wholeheartedly endorse this proposal. The name *Heteralocha* has been used for nearly a century not only in the ornithological literature, but in the biological as well. This is the genus with the remarkable sexual dimorphism of bill structure, and for this unique property it has been illustrated in numerous text-books, and treatises on evolution and ecology. Discarding the well-known name *Heteralocha* would only lead to confusion.

(b) By **E. G. TURBOTT**

(*Auckland War Memorial Museum, New Zealand*)

(Letter dated 5th March 1956)

I should like to record my support for the application of Fleming that the Commission should use its Plenary Powers to set aside the generic name *Neomorpha* Gould, 1837, in favour of the name *Heteralocha* Cabanis, [1851], for the New Zealand bird known as the Huia. *Heteralocha* has now been in general use for some 90 years.

(c) By **R. B. SIBSON**

(*King's College, Auckland, New Zealand*)

(Letter dated 6th March 1956)

I should like to record my support for the application of Fleming that the Commission should use its Plenary Powers to set aside the generic name *Neomorpha* Gould, 1837, in favour of the name *Heteralocha* Cabanis, [1851], for the New Zealand bird known as the Huia.

Dr. Fleming is especially qualified to speak on this matter. He is an authority on the taxonomy of New Zealand birds and was convener of the New Zealand Checklist Committee.

(d) By **B. J. MARPLES**

(Professor of Zoology, Otago University, N.Z.)

(Letter dated 6th March 1956)

I should like to record my support for the application of Fleming that the Commission should use its Plenary Powers to set aside the generic name *Neomorpha* Gould, 1837, in favour of the name *Heteralocha* Cabanis, [1851], for the New Zealand bird known as the Huia.

(e) By **W. R. B. OLIVER**

(26 Ventnor Street, Seatoun, Wellington, E.5, N.Z.)

(Letter dated 12th March 1956)

I should like to record my support for the application of Fleming that the Commission should use its Plenary Powers to set aside the generic name *Neomorpha* Gould, 1837, in favour of the name *Heteralocha* Cabanis, [1851], for the New Zealand bird known as the Huia.

As the name *Heteralocha* has been in general use for about 100 years it would cause a good deal of confusion to supersede it by *Neomorpha*. I have adopted *Heteralocha* in the last edition (1955) of my book on *New Zealand Birds*.

(f) By **R. A. FALLA**

(Director, Dominion Museum, Wellington, N.Z.)

(Letter dated 12th March 1956)

I should like to record my support for the application of Fleming that the Commission should use its Plenary Powers to set aside the generic name *Neomorpha* Gould, 1837, in favour of the name *Heteralocha* Cabanis, [1851], for the New Zealand bird known as the Huia.

**SUPPORT FOR PROFESSOR ROBERT MERTENS'S APPLICATION
REGARDING THE PROPOSED VALIDATION OF THE GENERIC
NAME "ELAPHE" FITZINGER, 1833 (CLASS REPTILIA)**

By **HOBART M. SMITH**

(University of Illinois, Urbana, U.S.A.)

(Commission Reference : Z.N.(S.) 824)

(For the proposal in this case see 1956, *Bull. zool. Nomencl.* 11(11) : 347-348)

(Letter dated 1st June 1956)

In my opinion the requests to the Commission embodied in the application by Robert Mertens relative to *Elaphe* Fitzinger, 1833, unquestionably merit approval.

PROPOSED USE OF THE PLENARY POWERS TO SUPPRESS THE SPECIFIC NAMES "VENULOSA" LAURENTI, 1768, AS PUBLISHED IN THE COMBINATION "RANA VENULOSA" AND "TIBIATRIX" LAURENTI, 1768, AS PUBLISHED IN THE COMBINATION "HYLA TIBIATRIX", TOGETHER WITH THE GENERIC NAME "ACRODYTES" FITZINGER, 1843 (CLASS AMPHIBIA, ORDER SALIENTIA)

By WILLIAM E. DUELLMAN

(Museum of Zoology, University of Michigan, Ann Arbor, Michigan, U.S.A.)

(Commission's reference : Z.N.(S.) 771)

The purpose of the present application is to ask the International Commission on Zoological Nomenclature to suppress the specific names *venulosa* and *tibiatrix*, both of Laurenti, 1768, as published in the combinations *Rana venulosa* and *Hyla tibiatrix* respectively.

2. The group of neotropical hyliid frogs in question are characterised by having paired lateral vocal sacs behind the angle of the jaws in the males and in the absence of any co-ossification of the skin with the roof of the skull. Until recently these frogs were considered to be only one species, but it is now realised that several species are included in the group.

3. In 1768, Laurenti (: 31) assigned the name *Rana venulosa* to a figure in Seba (1734, Vol. I, Pl. 72, fig. 4), giving the following description : "*Corpore venulosa, maculoso, maculis confluentibus, insulsis interjectis ; pedibus digitatus.*" The locality was given as "*Indiis*". In only one other instance has the combination *Rana venulosa* been used. This is to be found in Daudin (1802 : 24). The following year (1803) Daudin used the combination *Hyla venulosa* Laurenti (: 71). Since that time the combination *Hyla venulosa* has persisted in the literature, although the references to it are relatively few.

4. From the description given by Daudin and from careful study of his figure (1802, Pl. 13) I can find no similarity between the frog described by Laurenti and illustrated by Seba and that mentioned by Daudin. The bizarre illustration in Seba has been associated with a group of frogs, which do not

resemble the figure nor the description based upon that figure. Seba's illustration most certainly is not of a hyloid frog, and it is completely unrecognisable as any known member of that large group of frogs.

5. The nomenclatorial problem with *Hyla tibiatrix* is much the same as that of *Hyla venulosa*. Laurenti, 1768 (: 34) assigned the name *Hyla tibiatrix* to two figures in Seba (1734, Vol. I, Pl. 71, figs. 1-2) and gave the following description: "*Corpore dilute lactoe, maculis rubris, pedibus posticus palmatis. Mas coaxans utroque in latere colli, tibae inflat, inflat.*" The reference to locality given by Seba was "*Americanuarum*". This name was treated as applying to a variety of *Rana venulosa* by Daudin in 1802, and in no time after that it was accorded a higher rank. The figure in Seba may reasonably be associated with any one of three genera of American hyloid frogs. From the figure and description it is impossible to determine whether or not the skin is co-ossified with the skull and what is the condition of the vomerine teeth. These are characters that must be known to separate the genera in question.

6. Since the figure upon which the original description of *Rana venulosa* was based is unrecognisable as a member of the genus, and since the figure upon which the description of *Hyla tibiatrix* was based is not recognisable to genus, the specific names *venulosa* and *tibiatrix*, as published in the combinations *Rana venulosa* Laurenti, and *Hyla tibiatrix* Laurenti respectively should be considered *nomina dubia*.

7. A recent study of this group of frogs shows that the former wide-ranging "*Hyla venulosa*" actually is a composite of several species, the names of most of which have been hidden in the synonymy of *Hyla venulosa*. The oldest available names that can definitely be assigned to the two most widely distributed of these species are *Hyla spilomma* Cope, 1877 (: 86) and *Hyla zonata* Spix, 1824 (: 41). The first of these species ranges throughout eastern Mexico and northern Central America. The original description, accompanied by the definite type locality, are sufficient to identify this species beyond question. The latter species, *Hyla zonata*, occurs in the Amazon Basin of South America and extends into southern Central America. The original description, locality, and accompanying colour plate identify the nominal species with the population of these frogs occurring in the Amazon Basin. Although *Hyla zonata* was described in 1824 and *Hyla spilomma* in 1877, both have, for the most part, been referred to the synonymy of *Hyla venulosa*. It is recommended that, as part of the settlement represented by the proposed suppression of the *nomina dubia*, *Rana venulosa* Laurenti and *Hyla tibiatrix* Laurenti, these two specific names should be placed on the *Official List of Specific Names in Zoology*.

8. "*Hyla venulosa*" is the type species of the genus *Acrodytes* Fitzinger, 1843 (: 30). The suppression of the type species of this genus creates another nomenclatorial problem. However, the circumstances are such that Fitzinger

solved the problem himself. In his *Systema Reptilium* published in 1843 he listed eleven genera of hyliid frogs, the third of which is *Phrynohyas* (: 30), under which he listed four subgenera :

Phrynohyas—

<i>Cephalophractus</i> Fitz.	<i>Cephalo. galeatus</i> Fitz.
<i>Trachycephalus</i> Tschud.	<i>Trachycephalus nigromaculatus</i> Tschud.
<i>Phrynohyas</i>	<i>Hyla zonata</i> Spix
<i>Acrodytes</i>	<i>Hyla venulosa</i> Daudin

9. The type species (by monotypy) of *Phrynohyas* Fitzinger is thus *Hyla zonata* Spix. The specific name *zonata* is the oldest available specific name for the group of hyliid frogs with paired lateral vocal sacs behind the angle of the jaws and without the skin co-ossified with the skull. The subgeneric name *Acrodytes* Fitzinger was not accompanied by a description or a figure and rests solely upon the single included species *Hyla venulosa*, which is the type species by monotypy of the taxon so named. That species, as already noted, is not identifiable, but if it had clearly been a species congeneric with *Hyla zonata* Spix, the name *Acrodytes* would have fallen as a junior synonym of *Phrynohyas* Fitzinger, for the latter was introduced as the name of a genus, while *Acrodytes* was proposed only as the name for one of the units accepted by Fitzinger as subgenera of that genus. Since *Hyla venulosa* is unidentifiable, the genus *Acrodytes* of which it is the type species is also unidentifiable. The name *Acrodytes* Fitzinger should therefore be suppressed by the Commission under its Plenary Powers. For those who consider the hyliid frogs from Mexico and Central and South America to be a generically distinct group, the generic name which must be used is *Phrynohyas* Fitzinger.

10. In order to prevent further taxonomic confusion as to the concept of "*Hyla venulosa*", I ask the International Commission on Zoological Nomenclature :—

(1) to use its Plenary Powers to suppress the under-mentioned names for the purposes of the Law of Priority but not for those of the Law of Homonymy :—

(a) the generic name *Acrodytes* Fitzinger, 1843 ;

(b) the under-mentioned specific names :—

(i) *venulosa* Laurenti, 1768, as published in the combination
Rana venulosa ;

(ii) *tibiatrix* Laurenti, 1768, as published in the combination
Hyla tibiatrix ;

- (2) to place the under-mentioned generic name on the *Official List of Generic Names in Zoology* :—*Phrynohyas* Fitzinger, 1843 (gender : feminine) (type species, by monotypy : *Hyla zonata* Spix, 1824) ;
- (3) to place the under-mentioned specific names on the *Official List of Specific Names in Zoology* :—
 - (a) *zonata* Spix, 1824, as published in the combination *Hyla zonata* (specific name of type species of *Phrynohyas* Fitzinger, 1843) ;
 - (b) *spilomma* Cope, 1877, as published in the combination *Hyla spilomma* ;
- (4) to place the under-mentioned generic name on the *Official Index of Rejected and Invalid Generic Names in Zoology* :—*Acrodytes* Fitzinger, 1843, as suppressed under the Plenary Powers under (1) above ;
- (5) to place on the *Official Index of Rejected and Invalid Specific Names in Zoology* the specific names specified in (1)(b) above, as there suppressed under the Plenary Powers.

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PROPOSED ADDITION TO THE "OFFICIAL LIST OF GENERIC NAMES
IN ZOOLOGY" OF "AHAETULLA" LINK, 1807, WITH "AHAETULLA
MYCTERIZANA" LINK, 1807, AS TYPE SPECIES (CLASS REPTILIA)

By JAY M. SAVAGE

(Department of Biology, University of Southern California, Los Angeles,
California, U.S.A.)

and

JAMES A. OLIVER

(New York Zoological Society, New York City, N.Y., U.S.A.)

(Commission's reference : Z.N.(S.) 772)

The principal object of the present application is to ask the International Commission to place the generic name *Ahaetulla* Link, 1807, on the *Official List of Generic Names in Zoology* with *Ahaetulla mycterizana* Link, 1807, as type species. A secondary purpose of the present application is to provide an opportunity for the selection of a lectotype for the nominal species *Coluber ahaetulla* Linnaeus, 1758, and to ask the Commission to place the generic name *Leptophis* Bell, 1825, on the *Official List* with the above species as type species. The correct application of the generic name *Ahaetulla* Link and the name *Coluber ahaetulla* Linnaeus has been the subject of considerable controversy, and, as we have most recently studied the problem (Oliver, 1948, *Bull. Amer. Mus. nat. Hist.* 92 : 167 ; Savage, 1952, *Bull. Chicago Acad. Sci.* 9(11) : 203), it seems appropriate for us to make application to the Commission for rulings stabilising the usage of these and allied names.

2. The snakes primarily involved in this discussion by virtue of their use as type species of genera are *Ahaetulla ahaetulla* (Linnaeus), *Ahaetulla cardolineata* (Gray) and *Dryophis nasutus* (Lacépède) of south-eastern Asia and *Thalerophis richardi* (Bory St. Vincent) of South America. These names are those adopted in the recent generic reviews by Malcom Smith (1943, *Fauna Brit. India* 3 : 241), and Oliver, (*loc. cit.*), and for the sake of clarity will be used in the following historical summary of the problems.

3. The following are the references for the names discussed in the present paper on which action of one kind or another is asked for from the Commission:—

Ahaetulla Link, 1807, *Beschr. Nat. Samml. Rostock.* (2) : 73

Ahaetulla Gray (J.E.), 1825, *Ann. Phil.* 26 : 208

- ahaetulla*, *Coluber*, Linnaeus, 1758, *Syst. Nat.* (ed. 10) 1 : 225
caudolineata, *Ahaetulla*, Gray (J.E.), [1834], *Ill. Ind. Zool.* (2) : pl. 81
Dendrelaphis Boulenger, 1890, *Faun. Brit. Ind.*, Rept. Batr. : 339
Dendrophis Boie, in Fitzinger, *Neue Classif. Rept.* : 29, 60
Dryinus Merrem, 1820, *Tent. Syst. Amph.* : 15, 136
Dryophis Dalman, 1823, *Anat. Ent.* : 7
Leptophis Bell, 1825, *Zool. J.* 2(7) : 322
nasutus, *Coluber*, Lacépède, 1789, *Quadr. Ovip.* 2 : 100
Passerita Gray (J.E.), 1825, *Ann. Phil.* 26 : 208
Tachyophis Mertens, 1834, *Arch. Naturgesch.* (N.F.) 3 : 197

4. In the case of two out of the three genera, the names of which it is proposed should now be placed on the *Official List of Generic Names in Zoology* the type species was determined by subsequent selection under Rule (g) in Article 30. The following are the references for the type selections so made :—

For *Ahaetulla* Link, 1807 : Meise & Hennig, 1932, *Zool. Anz.* 99 : 296

For *Leptophis* Bell, 1825 : Fitzinger, 1853, *Syst. Rept.* : 26

SUMMARY OF THE PROBLEMS

a. The name "*Coluber ahaetulla*" Linnaeus, 1758

5. When Linnaeus (1758, *loc. cit.*) described *Coluber ahaetulla* from "Asia America", he presented no characters that would unequivocally diagnose the new form. Fortunately Lönnberg (1896, *Bihang. K. Svenska Vet.-Akad. Handl.* 22(4), 1 : 6, 26), and Andersson (1899, *Bihang. K. Svenska Vet.-Akad. Handl.* 24(4), 1 : 22) have shown that the Linnean material consisted of four examples of *Thalerophis richardi* from South America and one example of the Asiatic species which has been interpreted as *Ahaetulla ahaetulla* (Linnaeus). This material was mentioned under the name *C. ahaetulla* several times previous to the publication of the 10th Edition of the *Systema Naturae* (Linnaeus, 1745, 1748 and 1754). However, in the 10th Edition of the *Systema Naturae* Linnaeus gave the counts of only a single specimen, one of his examples of *Thalerophis richardi*. This appears to us to constitute a definite designation of a type specimen by Linnaeus as the original author, with the consequence of attaching the name *Coluber ahaetulla* to the South American species. All other workers have overlooked this virtual selection of a holotype by Linnaeus and as a result the name *Coluber ahaetulla* has been applied to both the South American snake later known as *Thalerophis richardi* and to the Asiatic species later known as *Ahaetulla ahaetulla* (Linnaeus). In order definitely to establish the name

Coluber ahaetulla Linnaeus as applicable to the South American species, we herewith select as the lectotype of this nominal species the specimen mentioned by Lönnerberg in 1896 (*Bihang K. svenska Vet.-Akad. Handl.* 22 (Afd. 4 (No. 1) : 5-6) as from *Donatio Caroli Gyllenborg*, 1744. This specimen is listed as Number 2 and has 162 ventrals and 152 subcaudals. The example is a member of the South American species.

6. The confusion regarding the correct application of the specific name *C. ahaetulla* is reflected by the number of generic names which have been used for it.

b. Generic names

7. As a result of the conclusion now submitted regarding the identity of *Coluber ahaetulla* Linnaeus, the following synonymy summarizes the effects that the allocation has on the application of the effected generic names :

(I) South American

- (A) *Leptophis* Bell, 1825 (type species by selection by Fitzinger (1843) : *Coluber ahaetulla* Linnaeus, 1758). Synonyms of *Leptophis* would be : *Ahaetulla* Gray, 1825 (type species by absolute tautonymy : *Coluber ahaetulla* Linnaeus, 1758) ; *Dendrophis* H. Boie, 1826 (type species, by original designation : *Coluber ahaetulla* Linnaeus, 1758) ; *Ahoetulla* Gray, 1831 (substitute name for *Leptophis* Bell ; takes same type species) ; *Thalerophis* Oliver, 1947 (type species by original designation : *Coluber richardi* Bory St. Vincent, 1823 = *Coluber ahaetulla* Linnaeus, 1758).

(II) Asian

- (A) *Dendrelaphis* Boulenger, 1890 (type species by monotypy : *Ahaetulla caudolineata* Gray, 1834). *Tachyophis* Mertens, 1934 (type species by original designation : *Coluber pictus* Gmelin, 1789—*Coluber boiga* Lacépède, 1789) is a synonym of *Dendrelaphis*. *Tachyophis* Rochebrune, 1884, has already been used for a genus of fossil snakes and Merten's name is therefore a junior homonym and unavailable.
- (B) *Ahaetulla* Link, 1807 (type species by selection by Meise & Hennig (1932) : *Ahaetulla mycterizans* Link, 1807 = *Coluber nasütus* Lacépède, 1789). Synonyms are : *Dryinus* Merrem, 1820 type species, by selection by Gray (1825) *Coluber mycterizans* Linné, 1758 (a junior homonym of *Dryinus* Latreille, [1804], a name in the Class Insecta already placed on the *Official List* ; *Dryophis* Dalman, 1823, and *Passerita* Gray, 1825, are both substitute names for *Dryinus* Merrem and consequently take the same type species.

As listed above, *Leptophis* would now apply to those snakes called *Thalerophis* by Oliver (1948, *loc. cit.*), *Dendrelaphis* must refer to those snakes included in *Ahaetulla* by Smith (1943, *loc. cit.*) and *Ahaetulla* now includes the forms placed in *Dryophis* by Smith (1943).

8. The availability of the name *Coluber boiga* Lacépède, 1789 (*Quadr. Ovip.* 2 : 102) has, however, been questioned and there has been discussion also regarding the interpretation of this name. Malcolm Smith (1943, *loc. cit.*) argued that it was not a valid binominal name. Further, he argued that the reference of "Le Boiga" to *Coluber ahaetulla* Linnaeus by Lacépède in a footnote should be interpreted as meaning that Link's *Ahaetulla fasciata* is the same as the *Coluber ahaetulla* of Linnaeus. On the basis of this argument Smith concluded that *Coluber ahaetulla* Linnaeus, 1758, was the type species of the genus *Ahaetulla* Link, 1807, by absolute tautonymy. These contentions have recently been examined by Savage (1952, *loc. cit.*) who has shown that both are incorrect. On the first of these questions Savage has shown (: 204) that, in introducing the *boiga*, Lacépède followed the practice commonly adopted by French zoologists until well into the XIXth century of introducing new names simultaneously in two forms, the word selected for the name being printed first in Roman characters and second in italics. The first of these words represented the actual or proposed vernacular (French) name for the species in question, the second the Latin specific name proposed for it. In accordance with the same practice Lacépède, after having once used the generic name which he adopted for a group, did not always repeat that name when citing the names of species. This method of citing names would not be regarded as satisfactory today but it was widely used by French zoologists at the end of the XVIIIth and the beginning of the XIXth centuries and has always been accepted as constituting a valid publication of the names concerned. Any other view, if adopted, would cause the utmost confusion and widespread name-changing. The contention advanced by Smith in this matter must therefore be unquestioningly rejected. His second contention is equally unfounded, for it is not the case that Lacépède regarded his *Coluber boiga* as a mere substitute for *Coluber ahaetulla* Linnaeus. On the contrary, he made it clear that, in his view, he was describing a new species based upon material examined personally by himself, for which he gave particulars of the number of ventrals and caudals, total length, tail length, and notes on the teeth, head and dorsal scales, and coloration. These matters are referred to here because it is essential to demonstrate the fallacy of Smith's argument that the type species of *Ahaetulla* Link, 1807, is *Coluber ahaetulla* Linnaeus, 1758, by absolute tautonymy as a preliminary to the acceptance of the selection by Meise & Hennig (1932) of *Ahaetulla mycterizana* Link, 1807, as the type species of this genus.

9. None of the genera discussed in the present application has been taken as the type genus of a family-group taxon and in consequence no family-group-name problems arise for consideration.

Recommendations

10. The interpretations presented in the foregoing paragraphs appear to be the ones in closest agreement with the International Rules of Zoological Nomenclature. However, some technical arguments might be mustered against some of the points involved. It is for this reason that the International Commission is now asked to close this long controversy by giving an authoritative Ruling as to the manner in which the names concerned are to be used. The proposal now submitted to the Commission is that it should :—

- (1) direct that the nominal species *Coluber ahaetulla* Linnaeus, 1758, be interpreted by reference to the lectotype selected in the present paper, namely the second of the South American Linnean specimens discussed by Lönnberg (1896) ;
- (2) place the under-mentioned generic names on the *Official List of Generic Names in Zoology* :—
 - (a) *Ahaetulla* Link, 1807 (gender : feminine) (type species, by selection by Meise & Hennig (1932) : *Ahaetulla mycterizana* Link, 1807) ;
 - (b) *Leptophis* Bell, 1825 (gender : masculine) (type species, by selection by Fitzinger (1843) : *Coluber ahaetulla* Linnaeus, 1758, as defined by the lectotype specified in (1) above) ;
 - (c) *Dendrelaphis* Boulenger, 1890 (gender : masculine) (type species, by monotypy : *Ahaetulla caudolineata* Gray (J.E.), 1834) ;
- (3) place the under-mentioned specific names on the *Official List of Specific Names in Zoology* :—
 - (a) *ahaetulla* Linnaeus, 1758, as published in the combination *Coluber ahaetulla* and as interpreted in (1) above (specific name of type species of *Leptophis* Bell, 1825) ;
 - (b) *caudolineata* Gray (J.E.), [1834], as published in the combination *Ahaetulla caudolineata* (specific name of type species of *Dendrelaphis* Boulenger, 1890) ;
 - (c) *nasutus* Lacépède, 1789, as published in the combination *Coluber nasutus* ;
- (4) place the under-mentioned generic names on the *Official Index of Rejected and Invalid Generic Names in Zoology* :—
 - (a) *Ahaetulla* Gray (J.E.), 1825 (a junior homonym of *Ahaetulla* Link, 1807) ;
 - (b) *Dendrophis* Boie (H.), 1826 (a junior objective synonym of *Leptophis* Bell, 1825) ;

- (c) *Tachyophis* Mertens, 1934 (a junior homonym of *Tachyophis* Rochebrune, 1884);
- (d) *Dryinus* Merrem, 1820 (a junior homonym of *Dryinus* Latreille, [1804], and a junior objective synonym of *Ahaetulla* Link, 1807);
- (e) *Dryophis* Dalman, 1823 (a junior objective synonym of *Ahaetulla* Link, 1807);
- (f) *Passerita* Gray (J.E.), 1825 (a junior objective synonym of *Ahaetulla* Link, 1807).

PROPOSED USE OF THE PLENARY POWERS TO VALIDATE THE UNIVERSALLY ACCEPTED EMENDATION "PALAEOPHONUS" OF THE GENERIC NAME "PALAEOPHONEUS" LINDSTRÖM & THORELL, 1884 (CLASS ARACHNIDA)

By ALEXANDER PETRUNKEVITCH

(Emeritus Professor of Zoology, Yale University, Osborn Zoological Laboratory, New Haven, Connecticut, U.S.A.)

(Commission's reference : Z.N.(S.) 1010)

The purpose of the present application is to ask the International Commission on Zoological Nomenclature to use its Plenary Powers to validate the universally used spelling *Palaeophonus* for the generic name originally published with the spelling *Palaeophoneus* by Lindström & Thorell in 1884 (*C. R. Acad. Sci.*, Paris 99 : 984) (Class Arachnida). It would be of great assistance if the present application could be published in the *Bulletin of Zoological Nomenclature* at a very early date, as it is desired to refer to it in the chapter on fossil Arachnida in the forthcoming international *Treatise on Invertebrate Paleontology*. The facts of this case are set out below.

2. The present generic name with the spelling *Palaeophoneus* was published in a letter from Lindström to Milne Edwards (A.) dated "Stockholm, le 24 novembre, 1884" and entitled "Sur un Scorpion du terrain silurien de Suède". In this letter, which gave particulars of a then forthcoming paper by Thorell and himself, Lindström, after giving an account of the new species, wrote :—"ce Scorpion que nous avons designé sous le nom de *Palaeophoneus nuncias* . . ." This preliminary note was published in the *C. R. Acad. Sci.*, Paris, on 1st December 1884.

3. This new species was next referred to in a notice which appeared in the issue of the *Glasgow Herald* of 19th December 1884. It appeared there with the correct spelling *Palaeophonus*.

4. In their main paper on this species, which was published in 1885 under the title "On a Silurian Scorpion from Gotland" (*K. Svensk. Vet.-Akad. Handl.* (n.s.[4]) 21(9) : 1-33, 1 pl.) Lindström & Thorell explained the circumstances in which they had given an advance distribution of news of their discovery and expressly stated that the correct spelling of this name was *Paleophonus* and not *Palaeophoneus*. On the first of these points they wrote :—"Owing to various hindrances no opportunity was found to make this discovery known before November the 12th 1884, when it was announced at the evening meeting of the Royal Academy of Sciences. A photograph, double the size of the original, was sent abroad to several museums and zoologists, after we had

agreed jointly to undertake this memoir and had named the animal *Palaeophonus nuncius* " (: 7). On page 9 of the same paper the authors stated in a footnote (Footnote 2) :—"The name of the genus should be written, as it is here, *Palaeophonus*, not *Palaeophoneus*". On the original label attached to the type specimen of the type species of this genus (now in the Stockholm Museum), this generic name was correctly spelled as *Palaeophonus*.

5. The incorrect spelling *Palaeophoneus* has never been used, arachnologists having accepted the statement that the correct spelling is *Palaeophonus* published by the celebrated and highly respected authors in their paper of 1885. It would clearly create great confusion if an attempt were now to be made to reverse the practice of the last seventy years by bringing the incorrect spelling *Palaeophoneus* into use. It is for this reason that the Commission is now asked to use its Plenary Powers to validate existing practice by approving the spelling *Palaeophonus*. This is all the more desirable in the present case, since the emendation to *Palaeophonus* would have been valid under Article 19 if it had not been for the more rigorous conditions introduced by the Copenhagen Congress of 1953.

6. The genus *Palaeophonus* was established for the species represented by the single specimen known. This species was given the name *Palaeophoneus nuncius* at the same time that the generic name was published. No other specimen of this species has ever been found and no other name has ever been given to it. Neither Lindström in his letter nor Thorell & Lindström in their Memoir expressly stated that this species was the type species of the genus *Palaeophonus* but both treated it as such, there being at that time no other known species which could be regarded as congeneric with it. In any case the fact that this was the only nominal species cited on the occasion on which the generic name *Palaeophonus* was first published makes it automatically the type species of the genus so named by monotypy.

7. In the Memoir of 1885, Thorell & Lindström established (: 23) the family PALAEOPHONOIDAE for the single genus and species *Palaeophonus nuncius*. This form of the family name was corrected to PALAEOPHONIDAE by Fritsch (A.) in 1904 (*Palaeozoische Arachniden* : 63). In its corrected form this family name is now in universal use. It should be noted that this family name should be attributed to Thorell & Lindström jointly and not to Lindström alone, for Lindström stated on page 2 of the Memoir "The third, fourth and fifth section of this paper are entirely by Prof. Thorell" and the family name was first mentioned in the second portion of the Memoir (: 9). The name in its corrected form should now be placed on the *Official List of Family-Group Names in Zoology*, the Invalid Original Spelling PALAEOPHONOIDAE being at the same time placed on the *Official Index of Rejected and Invalid Family-Group Names in Zoology*.

8. The following request is accordingly submitted to the International Commission on Zoological Nomenclature, namely that it should :—

- (1) use its Plenary Powers to validate the spelling *Palaeophonus* for the generic name *Palaeophoneus* Lindström & Thorell, 1884, by suppressing the latter spelling ;
- (2) place the under-mentioned generic name on the *Official List of Generic Names in Zoology* :—*Palaeophonus* (emendation of *Palaeophoneus*) Lindström & Thorell, 1884 (gender : masculine) (type species, by monotypy : *Palaeophoneus nuncius* Lindström & Thorell, 1884) ;
- (3) place the under-mentioned specific name on the *Official List of Specific Names in Zoology* :—*nuncius* Lindström & Thorell, 1884, as published in the combination *Palaeophoneus nuncius* (specific name of type species of *Palaeophonus* Lindström & Thorell, 1884) ;
- (4) place the under-mentioned generic name on the *Official Index of Rejected and Invalid Generic Names in Zoology* :—*Palaeophoneus* Lindström & Thorell, 1884, as suppressed under the Plenary Powers under (1) above (an Invalid Original Spelling for *Palaeophonus*) ;
- (5) place the under-mentioned family-group name on the *Official List of Family-Group Names in Zoology* :—PALAEOPHONIDAE (correction of PALAEOPHONOIDAE) Thorell & Lindström, 1885 (type genus : *Palaeophonus* (emend. of *Palaeophoneus*) Lindström, 1884) ;
- (6) place the under-mentioned family-group name on the *Official Index of Rejected and Invalid Family-Group Names in Zoology* :—PALAEOPHONOIDAE Thorell & Lindström, 1885 (type genus : *Palaeophonus* (emend. of *Palaeophoneus*) Lindström, 1884) (an Invalid Original Spelling for PALAEOPHONIDAE).

PROPOSED DETERMINATION UNDER THE PLENARY POWERS OF
THE INTERPRETATION OF THE NOMINAL SPECIES "ACTINOCRINUS
GILBERTSONI" PHILLIPS, 1836 (CLASS CRINOIDEA)

By J. WRIGHT (Edinburgh)

(Commission's reference : Z.N.(S.) 1057)

The purpose of the present application is to ask the International Commission on Zoological Nomenclature to give directions under its Plenary Powers that the nominal species *Actinocrinus gilbertsoni* Phillips, 1836 (Class Crinoidea) be interpreted by reference to the neotype designated therefor by the present applicant in 1955 (Wright (J.), 1955 : 193).

2. The nominal species *Actinocrinus gilbertsoni* Phillips (1836 : 206, pl. iv, fig. 19) was described from a single specimen (which is therefore the holotype) from the Carboniferous Limestone of "Bolland" in the collection of William Gilbertson. The holotype cannot be found in the British Museum (Natural History), where Gilbertson's collection is now housed. It has also been sought, without success, in the Geological Survey and Museum (London), the Sedgwick Museum (Cambridge), the Oxford University Museum, the Yorkshire Museum (York) and the museums of Bristol, Leeds, Blackburn, Preston, Manchester, Liverpool and Scarborough. It is therefore presumed lost.

3. The nominal genus *Amphoracrinus* was established by T. Austin, Jr. (1848 : 292) for the nominal species *Actinocrinus gilbertsoni* Phillips, *A. crassus* and *A. granulatus* T. and T. Austin (1843 : 201) and a fourth unnamed species. *A. crassus* and *A. granulatus* were briefly described, but they were not figured, and since they were barely recognisable from the descriptions even at the time, *A. gilbertsoni* is virtually the only species eligible to be the type species of *Amphoracrinus*; it was first formally so selected by Wachsmuth and Springer (1881 : 329) (: 155 of separate), and no earlier selection of a type species for this genus is known.

4. The nominal family AMPHORACRINIDAE was proposed by Bather (1899 : 922) for the reception of this genus.

5. The specimen designated as neotype by the present author in 1955 agrees with what is known of the lost holotype. It was collected by the writer from the Carboniferous Limestone of Bellman Quarry, Clitheroe, Lancashire, which lies within the area of Bolland, the type-locality. It was described and figured by the author in 1943 (Wright, J., 1943 : 86, pl. iv, figs. 2-4, 9) as well as in 1955 (*loc. cit.*). It has been presented to the Royal Scottish Museum,

Edinburgh. This is a museum which has proper facilities for preserving type specimens and which gives research workers access to its collections. The following are attached to the specimen :—

- (1) White number-label 1954–20, the official registration number of the specimen.
- (2) The number 2406 written in indian ink, the number formerly given to the specimen in the writer's collection.
- (3) A red label marked " TYPE ".

6. Accompanying the specimen are the following labels :—

- (1) "*Amphoracrinus gilbertsoni* (Phillips), Zone C, Bellman Quarry, Clitheroe."
- (2) "Figd. J. Wright, 1943, Geol. Mag. vol. lxxx, pl. iv, figs. 2–4, 9; 1955, Palaeont. Soc., pl. xlix, figs. 3, 16, pl. 1, figs. 3, 9."
- (3) "1954–20. Neotype—Wright."

7. The purpose of designating a neotype in this instance was to stabilise the usages of the binomen *Amphoracrinus gilbertsoni* (Phillips) and of the family-name AMPHORACRINIDAE in their accustomed sense and to protect these names from the instability that might at any moment arise so long as the nominal species *Actinocrinus gilbertsoni* Phillips is not defined by reference to a type specimen. This course is particularly desirable in the case of a crinoid such as *gilbertsoni* Phillips, for which it might otherwise be possible for some later author to give an interpretation different from that currently accepted, even though, as there is every reason to believe, the current interpretation is correct. Stability in the nomenclature of this group can only be assured if a neotype is designated for the present species and if its name and those of the immediately associated taxa are added to the appropriate *Official Lists*. The names in question are in each case the oldest available names for the taxa concerned. They are all in current use and have enjoyed uninterrupted usage since the dates of their respective first publication.

8. The International Commission is therefore requested to use its Plenary Powers :—

- (1) to give directions under its Plenary Powers that the nominal species *Actinocrinus gilbertsoni* Phillips, 1836, be interpreted by reference to the specimen designated and figured as the neotype of that species by the present applicant in 1955 (: pl. xlix, figs. 3, 16; pl. 1, figs. 3, 9) and, prior to being so designated, figured also by the same author in 1943 (: pl. iv, figs. 2, 3, 4, 9);

- (2) to place the under-mentioned generic name on the *Official List of Generic Names in Zoology*: *Amphoracrinus* Austin (T.), Jr., 1848 (gender : masculine) (type species, by selection, by Wachsmuth & Springer (1881) : *Actinocrinus gilbertsoni* Phillips, 1836, interpreted as specified in (1) above);
- (3) to place the under-mentioned specific name on the *Official List of Specific Names in Zoology*: *gilbertsoni* Phillips, 1836, as published in the combination *Actinocrinus gilbertsoni*, interpreted as specified in (1) above (specific name of type species of *Amphoracrinus* Austin (T.), Jr., 1848);
- (4) to place the under-mentioned family-group name on the *Official List of Family-Group Names in Zoology*:—AMPHORACRINIDAE Bather, 1899 (type genus : *Amphoracrinus* Austin (T.), Jr., 1848).

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PROPOSED ADDITION TO THE RESPECTIVE " OFFICIAL LISTS " OF THE
GENERIC NAME " LIMNOCY THERE " BRADY, 1868, AND THE FAMILY-
GROUP NAME " LIMNOCY THERINAE " SARS, 1925 (CLASS CRUSTACEA,
ORDER OSTRACODA)

By P. C. SYLVESTER-BRADLEY

(Universities of Sheffield, England, and Kansas, U.S.A.)

and

H. V. HOWE

(Louisiana State University, U.S.A.)

(Commission's reference : Z.N.(S.) 1071)

The purpose of the present application is to regularise the spelling of the family-group name LIMNOCY THERINAE, introduced in the form LIMNOCY THERINAE but based on the genus *Limnocythere* Brady, 1868.

2. The name *Limnocythere* was introduced by G. S. Brady (1868, *Intellectual Observer* 12 : 121) for two species, *Cythere inopinata* Baird, 1843 (*Zoologist* 1 : 195) and *Cypris monstifica* Norman, 1862, the former of which was subsequently selected as the type species of the genus (G. S. Brady and A. M. Norman, 1889, " Monogr. of the Marine and Fresh-water Ostracoda of the N. Atlantic and of N.W. Europe. Section I. Podocopa " *Sci. Trans. Roy. Dublin Soc.* (2) 4 : 170).

3. The article in the *Intellectual Observer* in which the name *Limnocythere* was introduced incorporated an extended conspectus of a monograph on the British Ostracoda which Brady had read before the Linnean Society of London in 1866, but which was not published until late in 1868, after the appearance of the article in the *Intellectual Observer*. When the monograph appeared, the name for the genus was spelt *Limnocythere* (1868, Brady, " Monogr. of the Recent British Ostracoda ", *Trans. linn. Soc. Lond.* 26 : 419-420). Reference in a footnote was made to the article in the *Intellectual Observer*. No reference was made to the change in spelling, and the name was not consistently spelt that way in the monograph (*Limnocythere* appearing in a " Classified Table " on page 358). The name *Limnocythere* Brady, 1868, is therefore an Erroneous Subsequent Spelling rather than as Emendation in terms of the definitions introduced at Copenhagen (1953, *Copenhagen Decisions zool. Nomencl.* : 44). As such it has no standing in nomenclature. Brady himself, however, continued to use the spelling *Limnocythere*, and adopted it, again without comment, in a later extension of his monograph (Brady and Norman, 1889, *op. cit.*, : 170). At first this spelling became current, though not quite universal. Latterly,

however (mainly after the publication of G. W. Müller's contribution to "*Das Tierreich*": Lief 31. Ostracoda. Berlin, 1912) the original spelling *Limnocythere* has gained wider acceptance, and is now used almost to the exclusion of *Limnicythere*.

4. Sars, in his great work on the "Crustacea of Norway", introduced a subfamily based on the genus which he called LIMNICYTHERINAE (1925, *Crustacea of Norway* 9 Ostracoda : 148). As this name was based on a misspelling of the generic name, Klie (1938, *Die Tierwelt Deutschlands*, Teil 34, Krebstiere oder Crustacea III, Ostracoda, Muschelkrebse, Jena : 149) quite properly corrected it to LIMNOCYTHERINAE.

5. We have been unable to discover any publication in which the name *Limnocythere* was formally emended to *Limnicythere*. As the latter name was extensively used for fifty years after its first publication, however, it is possible that we have missed a reference in which an author made clear his intention of using *Limnicythere* as a substitute for *Limnocythere*. Such a case would confer on the name *Limnicythere* the status of an Invalid Emendation, which for the purposes of nomenclature would then be a junior objective synonym of *Limnocythere*. Family-Group names based on junior objective synonyms are, according to the decisions taken at Copenhagen (1953, *Copenhagen Decisions zool. Nomencl.* : 36) valid, and, if senior, take precedence over the name based on the valid name of the type genus. In that case LIMNICYTHERINAE would take preference over LIMNOCYTHERINAE.

6. We consider this ambiguity as to the correct spelling of this family-group name to be highly undesirable, and accordingly recommend that the Commission should direct :—

- (1) that the generic name *Limnocythere* Brady, 1868 (gender : feminine) (type species, by selection by Brady and Norman (1889) : *Cythere inopinata* Baird, 1843) be placed on the *Official List of Generic Names in Zoology* ;
- (2) that the generic name *Limnicythere* Brady, 1868, be regarded an Erroneous Subsequent Spelling with no nomenclatorial status, and accordingly be placed on the *Official Index of Rejected and Invalid Generic Names in Zoology* ;
- (3) that the family-group name LIMNOCYTHERINAE Sars, 1925 (correction by Klie, 1938, of the Invalid Original Spelling LIMNICYTHERINAE) be placed on the *Official List of Family-Group Names in Zoology* ;
- (4) that the family-group name LIMNICYTHERINAE Sars, 1925 (either an Invalid Original Spelling or a name based on a generic name which is an Invalid Emendation) be placed on the *Official Index of Rejected and Invalid Family-Group Names in Zoology* ;
- (5) the specific name *inopinata* Baird, 1843, as published in the combination *Cythere inopinata* (specific name of type species of *Limnocythere* Brady, 1868) be placed on the *Official List of Specific Names in Zoology*.

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24th August, 1956

THE BULLETIN OF ZOOLOGICAL NOMENCLATURE

The Official Organ of
THE INTERNATIONAL COMMISSION ON
ZOOLOGICAL NOMENCLATURE

Edited by
FRANCIS HEMMING, C.M.G., C.B.E.
Secretary to the International Commission on Zoological Nomenclature

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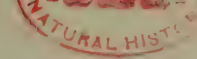
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BULLETIN OF ZOOLOGICAL NOMENCLATURE

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24th August 1956

NOTICES PRESCRIBED BY THE INTERNATIONAL CONGRESS OF ZOOLOGY

The following notices are given in pursuance of decisions taken, on the recommendation of the International Commission on Zoological Nomenclature (see 1950, *Bull. zool. Nomencl.* 4 : 51—56, 57—59), by the Thirteenth International Congress of Zoology, Paris, July 1948 (see 1950, *Bull. zool. Nomencl.* 5 : 5—13, 131).

(a) Date of commencement by the International Commission on Zoological Nomenclature of Voting on applications published in the "Bulletin of Zoological Nomenclature"

NOTICE is hereby given that normally the International Commission will start to vote upon applications published in the *Bulletin of Zoological Nomenclature* on the expiry of a period of six calendar months from the date of publication in the *Bulletin* of the applications in question. Any specialist who may desire to comment upon any of the applications published in the present Part (Vol. 12, Part 6) of the *Bulletin* is accordingly invited to do so in writing to the Secretary to the Commission, as quickly as possible and in any case, in sufficient time to enable the communication in question to reach the Secretariat of the Commission before the expiry of the six-month period referred to above.

(b) Notice of the possible use by the International Commission on Zoological Nomenclature of its Plenary Powers in two cases

NOTICE is hereby given that the possible use by the International Commission on Zoological Nomenclature of its Plenary Powers is involved in applications published in the present Part of the *Bulletin of Zoological Nomenclature* in relation to the following cases :—

- (1) *alligator* Blumenbach, 1779 (*Lacerta*), suppression of, to protect *mississippiensis* Daudin, [1801–1802] (*Crocodylus*) (Class Reptilia) (Z.N.(S.) 551) ;
- (2) *Campsicnemus* Haliday, 1851, validation of (Class Insecta, Order Diptera) (Z.N.(S.) 1080).

Notices prescribed by the International Congress of Zoology (*continued*)

2. Comments received in sufficient time will be published in the *Bulletin* : other comments, provided that they are received within the prescribed period of six calendar months from the date of publication of the present Part will be laid before the International Commission on Zoological Nomenclature at the time of commencement of voting on the application concerned.

3. In accordance with the procedure agreed upon at the Session held by the International Commission on Zoological Nomenclature in Paris in 1948 (see 1950, *Bull. zool. Nomencl.* 4 : 56), corresponding Notices have been sent to the serial publications *Nature* and *Science*.

FRANCIS HEMMING

*Secretary to the International Commission on
Zoological Nomenclature*

28 Park Village East, Regent's Park,
LONDON, N.W.1, England.

24th August 1956.

PROPOSED USE OF THE PLENARY POWERS TO ENSURE THAT
THE SPECIFIC NAME "MISSISSIPIENSIS" DAUDIN, [1801-1802] AS
PUBLISHED IN THE COMBINATION "CROCODILUS MISSISSIPI-
ENSIS" SHALL BE THE OLDEST AVAILABLE NAME FOR THE
NORTH AMERICAN ALLIGATOR (CLASS REPTILIA) (SUPPLEMENT
TO, AND, IN PART, CORRECTION OF, A RULING GIVEN IN
"OPINION" 92)

By FRANCIS HEMMING, C.M.G., C.B.E.,

Secretary to the International Commission on Zoological Nomenclature

(Commission Reference : Z.N.(S.) 551)

Historical Background

The purpose of the present application is to seek the approval of the International Commission on Zoological Nomenclature for the correction in certain particulars of the entry relating to the generic name *Alligator* Cuvier, 1807 (Class Reptilia) made on the *Official List of Generic Names in Zoology* by a Ruling given in *Opinion* 92 (1926, *Smithson. misc. Coll.* 73 (No. 4) : 3-4). The need for action in this matter has been brought to light in the course of the examination, in preparation for the forthcoming publication of the *Official List* for publication in book-form, of the entries made thereon in the period up to the end of 1936. This examination brought to light also the need for the use by the Commission of its Plenary Powers in one respect if the position of the name *mississipiensis* Daudin for the North American Alligator is to be fully assured. The points at issue are set out in the following paragraphs.

2. The generic name *Alligator* Cuvier (G.L.C.F.D.), (1807 (*Ann. Mus. Hist. nat.*, Paris 10 : 25) was published as the name for a subgenus of the genus *Crocodilus*. Cuvier placed in this subgenus four nominal species, of which the first was *Crocodilus (Alligator) lucius* (: 64), a new nominal species described from "America septentrionalis". Cuvier did not designate or indicate a type species for his subgenus *Alligator*. The first type selection for this genus was made by Stejneger (L.) & Barbour (T.) in 1917 (*Check List N. Amer. Amphib. Rept.* (ed. 1) : 41), who so selected the nominal species *Crocodilus (Alligator) lucius* Cuvier. This type selection is currently accepted by all specialists in this group (see paragraph 5 below).

3. When in 1926 the name *Alligator* Cuvier was placed on the *Official List* (*loc. cit.* : 3), the type species was given as "*Crocodilus mississippiensis* Daudin, 1803". This entry was incorrect, for the nominal species so named by Daudin was not among the nominal species cited by Cuvier when establishing the nominal taxon *Alligator*. The date "1803" given for the name *mississippiensis* Daudin in *Opinion* 92 is also incorrect, for the volume in which this name appeared is dated "An X" of the French Revolutionary Calendar, i.e. the twelve-month period September 1801 to September 1802. The correct reference for this name is *Crocodilus mississippiensis* Daudin, [1801-1802], *Hist. nat. gén. partic. Rept.* 2 : 412, nota (1).

4. The subsequent investigation undertaken in the Office of the Commission brought to light two problems affecting the entries to be made on the *Official Lists* and *Official Indexes* in this case which raised also taxonomic issues on which it was apparent that it would be necessary to obtain the views of representative specialists before proposals could be formulated for the consideration of the International Commission. These issues were :—

- (a) Is the name *Lacerta alligator* Blumenbach, 1779, an actual or potential senior subjective synonym of *Crocodilus mississippiensis* Daudin, [1801-1802] ?
- (b) Is it agreed that the nominal species *Crocodilus* (*Alligator*) *lucius* Cuvier, 1807, and *Crocodilus mississippiensis* Daudin, [1801-1802], represent the same taxonomic unit ?

5. In order to obtain the necessary taxonomic advice on which to base a proposal for the consideration of the International Commission a questionnaire asking for views on the foregoing questions was issued by the Office of the Commission on 7th February 1956 to a number of specialists who, it was thought, would be interested in the issues involved and would be in a position to furnish advice on the action which it was desirable should be taken by the Commission. In the same questionnaire was included a request for information on the question whether the type selection for *Alligator* Cuvier made by Stejneger & Barbour in 1917 was the earliest such selection made for this nominal species. All the specialists who dealt with this point in their replies stated that, so far as they were aware, the above was the first type selection made for this genus. That type selection has accordingly been accepted in the present paper (paragraph 2 above). The specialists consulted on the foregoing matters were either known to be specialists in the group concerned or by reason of working at National Natural History Museums were in a position to obtain and furnish to this Office the views of representative specialists in their respective countries.

6. The specialists who have been so good as to assist the International Commission with advice in the present case are the following :—

J. Guibé (*Muséum National d'Histoire Naturelle, Paris*)

E. M. Hering (*Humboldt-Universität zu Berlin, Zoologisches Museum, Berlin*)

Tadeusz Jaczewski (*The Polish Academy of Sciences, Institute of Zoology, Warsaw*)

Arthur Loveridge (*Museum of Comparative Zoology at Harvard College, Massachusetts, U.S.A.*)

Robert Mertens (*Forschungs-Institut u. Natur-Museum Senckenberg, Frankfurt a.M.*)

A. I. Ortenburger (*University of Oklahoma, Norman, Oklahoma, U.S.A.*)

H. W. Parker (*British Museum (Natural History), London*)

Jay M. Savage (*University of South California, Los Angeles, California, U.S.A.*)

Karl P. Schmidt (*Chicago Natural History Museum, Chicago, Illinois, U.S.A.*)

Hobart M. Smith (*University of Illinois, Urbana, Illinois, U.S.A.*)

Malcolm Smith (*British Museum (Natural History), London*)

Heinz Wermuth (*Zoologisches Museum, Berlin*)

**Question of the possible suppression under the Plenary Powers
of the specific name "alligator" Blumenbach, 1779, as published
in the combination "Lacerta alligator"**

7. The first of the matters put to the consultant specialists was whether having regard to the early date of the binomen *Lacerta alligator* Blumenbach (J.F.), 1779, *Handb. Naturgesch.* (1) : 263) and the fact that it was commonly treated as representing in part the same species as that which later was named *Crocodylus mississippiensis* by Daudin, it was "considered that the interests of stability in nomenclature would be promoted if the Commission were to suppress the above name [*alligator* Blumenbach] under its Plenary Powers". The following is the portion of the paper submitted to specialists in explanation of the grounds on which the above question was submitted :—

The nominal species *Crocodylus lucius* Cuvier, 1807, has been identified in later literature with *Crocodylus mississippiensis* Daudin [1801–1802]. Both species have been identified also as being "in part" the same as *Lacerta alligator* Blumenbach, 1779, e.g. by Stejneger (1917). If, as appears to be the case, Blumenbach's species *alligator* is considered by specialists to be a composite species which included amongst others the North American Alligator,

that name will, by reason of its early date, be a constant menace to nomenclatorial stability, for at any moment some specialist by invoking the provisions of Article 31, might seek to fix Blumenbach's name *alligator* to one of the component species. From the point of view of promoting nomenclatorial stability there seems therefore to be a strong case for asking the Commission to use its Plenary Powers to suppress the specific name *alligator* Blumenbach, 1779. The situation is further aggravated by the fact that some authors (e.g. Mook (C.C.) & Mook (G.E.), 1940 : 5) have taken the view that *alligator* Blumenbach is virtually unidentifiable, the description being so poor. Mook's discussion of Blumenbach's name *alligator* is included in his paper in the Section headed "The North American Crocodile" and it is to be inferred therefore that his view was that, if the name *alligator* Blumenbach could be interpreted at all, it applied to the above species and not to the Alligator of the Mississippi. It seems therefore that the continued availability for nomenclatorial purposes of the specific name *alligator* Blumenbach, 1779, not only serves no useful purpose but actually constitutes a serious potential threat to nomenclatorial stability. It is therefore suggested for consideration that the best course would be for the Commission, when dealing with the problem of the generic name *Alligator* Cuvier, 1807, to use its Plenary Powers to suppress the dangerous *nomen dubium* the specific name *alligator* Blumenbach, 1779, as published in the combination *Lacerta alligator*.

8. The advice received from specialists has proved to be overwhelmingly in favour of the suppression of the specific name *alligator* Blumenbach, 1779. Ten (10) out of the twelve (12) specialists consulted advise this course (Guibé ; Hering ; Jaczewski ; Loveridge ; Mertens ; Ortenburger ; Savage ; Schmidt ; Smith (H.M.) ; Wermuth). Of the remainder one (Malcolm Smith) considered that the name *alligator* Blumenbach is a *nomen dubium* and cannot be used, while the other (Parker) is opposed to the use of the Plenary Powers in a case such as the present. The replies received on this question are given in Annexe 1 to the present paper. In view of the advice received a proposal for the suppression of the specific name *alligator* Blumenbach under the Plenary Powers is included in the present paper.

**Interpretation of the nominal species "*Crocodilus (Alligator) lucius*"
Cuvier, 1807, and "*Crocodilus mississippiensis*" Daudin [1801-1802]**

9. The question put to the consultant specialists under Heading (c)—the question under Heading (b) related to the question of the place where a type species for *Alligator* Cuvier was first validly selected (as to which reference should be made to paragraph 5 above)—was as follows :—"Is the identification of the nominal species *Crocodilus lucius* Cuvier, 1807, and of *Crocodilus mississippiensis* Daudin [1801-1802] based upon firm foundations or are there difficulties in this matter which have been glossed over?" The following is the portion

of the paper submitted to specialists in explanation of the grounds on which the above question was submitted :—

The next question on which it is desired to obtain the advice of specialists is whether the original descriptions (a) of *Crocodilus lucius* Cuvier, 1807, and (b) of *Crocodilus mississippiensis* Daudin, [1801–1802] clearly apply to one species only, that species being unquestionably the North American species to which the name *mississippiensis* Daudin is commonly applied. It is judged necessary to raise this question owing to the fact that among the documents of the Commission relating to this case there are a number of obscure observations which appear to imply that the current identification of one or other of the above nominal species rests upon insecure foundations or is even known to be incorrect. This is a matter which the Commission will need to satisfy itself about before it commits itself to the publication of the *Official List* in book-form, for it is anxious above all things to secure that, when that volume is published, it shall not be marred by avoidable errors. Moreover, with the help of its Plenary Powers the Commission is in a position to overcome any difficulties which may at present be resting hidden in this matter by providing a solution in harmony with current nomenclatorial usage.

10. Of the twelve specialists who returned answers to the question quoted at the beginning of paragraph 9 above nine (9) replied that there was no doubt that the nominal species *Crocodilus (Alligator) lucius* Cuvier and *Crocodilus mississippiensis* Daudin represented the same taxonomic species. The specialists so advising were :—Guibé ; Hering ; Mertens ; Ortenburger ; Parker ; Savage ; Schmidt ; Smith (M.) ; Wermuth. The remaining three (3) specialists (Jaczewski ; Loveridge ; Smith (H.M.)) replied that they were not in a position to give a definite reply, but one (1) (Smith (H.M.)) pointed out that the two nominal taxa concerned had been treated as representing the same taxonomic unit for at least the last seventy-five years. The replies received on this question are given in Annexe 2 to the present paper.

11. The replies to this part of the questionnaire elicited one very important piece of information which had not previously been brought to the attention of the International Commission, namely, that the nominal species *Crocodilus (Alligator) lucius* Cuvier, 1807, and *Crocodilus mississippiensis* Daudin, [1801–1802], were based in part upon the same material and therefore that, if the specimen which was a syntype of both of these nominal species were to be selected as the lectotype of each of these nominal species, the names *lucius* Cuvier and *mississippiensis* Daudin would become objective synonyms, and not merely subjective synonyms, of one another. This question was raised by four (4) of consultant specialists, namely :—Guibé ; Mertens ; Parker ; Savage. It was evident that a solution of this problem on the foregoing lines offered great advantages from the point of view of promoting nomenclatorial stability. As the result of further consultations Professor Mertens agreed to furnish a note containing a twofold lectotype selection on the lines described above,

the note so furnished to be submitted to the Commission as part of the present application. Professor Mertens has now furnished the promised note which is attached to the present paper as Annexe 3. As the result of the lectotype selection so made by Professor Mertens, the specific name *lucius* Cuvier, 1807, becomes a junior objective synonym of *mississippiensis* Daudin, [1801-1802]. As an objectively invalid name, it should therefore be placed on the *Official Index of Rejected and Invalid Specific Names in Zoology* at the same time that the name *mississippiensis* Daudin is placed on the *Official List of Specific Names in Zoology*.

12. At this point it is necessary to call attention to the Commission's recently published *Declaration 21* (1956, *Ops. Decls. int. Comm. zool. Nomencl.* 12(11) : i-viii) which provides that, "where there are two or more identical nominal species (i.e. nominal species, the names of which are objective synonyms of one another), the designation, indication or selection of any one of those nominal species to be the type species of a genus is to be treated as the designation, indication or selection of whichever of the nominal species concerned has the oldest available name, irrespective of whether or not that nominal species was cited by the author of the name of the genus in question". In view of the action of Professor Mertens in selecting the same specimen to be the lectotype of *Crocodylus* (*Alligator*) *lucius* Cuvier, 1807, and of *Crocodylus mississippiensis* Daudin, [1801-1802], these names, as being objective synonyms of one another come within the scope of the provisions of the *Declaration* referred to above. Accordingly, the name to be cited as that of the type species of the genus *Alligator* Cuvier is *Crocodylus mississippiensis* Daudin, [1801-1802], and not *Crocodylus* (*Alligator*) *lucius* Cuvier, 1807.

**Orthography of the specific name "mississippiensis" Daudin,
[1801-1802], as published in the combination "Crocodylus
mississippiensis"**

13. It will be noted from the bibliographical reference given in paragraph 3 above that the specific name for the North American Alligator was published in Daudin's work as *mississippiensis*, i.e. with a single instead of with a double "p" at the end of the third syllable of the word. It is part of the present proposal that the International Commission should place this name on the *Official List of Specific Names in Zoology*. For this purpose it will be necessary to consider whether the above spelling is to be adopted or whether it is to be looked upon as a mis-spelling which ought to be emended to *mississippiensis*, either under the decisions taken by the Copenhagen Congress for the emendation of names (1953, *Copenhagen Decisions zool. Nomencl.* : 43-44, Decision 71) or, in default, by action by the Commission under its Plenary Powers. Clearly the first step in such a case is to examine the book in which the name was first

published in order to determine whether it contains any clear evidence that the spelling used was due to inadvertence. In the present case reference to Daudin's book discloses no such evidence. Daudin applied to this species the vernacular (French) name "Le Crocodile du Mississipi" and his description of this species contains numerous references to this river which in every case was spelled by him with a single "p". It is evident therefore that Daudin regarded this spelling as the correct spelling. Nor is it possible to argue that the name of this river is correctly spelled only with a double letter "p" and therefore that Daudin's use of a single "p", both when using it as a French word and as a Latinised word is necessarily incorrect; for reference to the Oxford English Dictionary shows that in former times the spelling with a single "p" was not uncommon and should not be called incorrect. Accordingly, the emendation of this name to a spelling with a double "p" could not reasonably be justified on the ground that this was the currently accepted spelling and that such an emendation under the Plenary Powers was desirable in order to avoid interference with established nomenclatorial practice. In the present case both the original spelling with the single "p" and the emended spelling with the double "p" have been used, but it does not appear that the emended spelling can be claimed to be in general use, for the original spelling with the single "p" has been used in the influential *Check List* of Stejneger and Barbour which has been widely followed in such matters by many authors. Unless therefore fresh evidence is elicited as the result of the publication of the present application, it appears that the spelling with the single "p" is not only the valid original spelling for this name but is also in sufficiently wide general use as to make it undesirable that this spelling should be emended to a spelling with a double "p". Subject to the foregoing reservation it is accordingly proposed that the specific name *mississippiensis* Holbrook (J.E.), 1842 (*N. Amer. Herp.* 2 : 53), as published in the combination *Alligator mississippiensis*, be rejected as an Invalid Emendation of *mississippiensis* Daudin, [1801-1802], as published in the combination *Crocodylus mississippiensis*, and that it should be thereupon placed on the *Official Index of Rejected and Invalid Specific Names in Zoology*, together with the Erroneous Subsequent Spelling *missisipensis* Gray (J.E.), 1831 (*Syn. Rept.* : 62), as published in the combination *Alligator missisipensis*.

Family-group-name aspect

14. The genus *Alligator* Cuvier was made the type genus of a nominal family-group taxon by J. E. Gray who in 1944 (*Cat. Tortoises Crocodiles Amphisbaenians Coll. Brit. Mus.* : 56) published the family-group name ALLIGATORIDAE. Under the General Directive issued to the International Commission by the International Congress of Zoology this name should now be placed on the *Official List of Family-Group Names in Zoology*.

Recommendations

15. In the light of the information kindly furnished by specialists which has been summarised in the present application and is given in greater detail in the attached annexes, I recommend that, in order to clear this particular

item in preparation for the publication of the *Official List* in book-form, the International Commission on Zoological Nomenclature should :—

- (1) use its Plenary Powers to suppress the under-mentioned specific name for the purposes of the Law of Priority but not for those of the Law of Homonymy: *alligator* Blumenbach, 1779, as published in the combination *Lacerta alligator* ;
- (2) rule that the spelling of the specific name *mississippiensis* Daudin, [1801–1802], as published in the combination *Crocodylus mississippiensis*, is a Valid Original Spelling ;
- (3) substitute the following emended entry on the *Official List of Generic Names in Zoology* relating to the generic name *Alligator* Cuvier, 1807 :—

427. **Alligator** Cuvier, 1807 (gender : masculine) (type species, by selection by Stejneger (L.) & Barbour (T.) (1917) and through *Declaration* 21 : **Crocodylus mississippiensis** Daudin, [1801–1802]) ;

- (4) place the under-mentioned specific name on the *Official List of Specific Names in Zoology* : *mississippiensis* Daudin, [1801–1802], as published in the combination *Crocodylus mississippiensis* (specific name of type species of *Alligator* Cuvier, 1807) ;
- (5) place the under-mentioned specific names on the *Official Index of Rejected and Invalid Specific Names in Zoology* :—
 - (a) *alligator* Blumenbach, 1779, as published in the combination *Lacerta alligator* (name proposed to be suppressed under (1) above under the Plenary Powers) ;
 - (b) *lucius* Cuvier, 1807, as published in the combination *Crocodylus (Alligator) lucius* (a junior objective synonym of *mississippiensis* Daudin, [1801–1802], as published in the combination *Crocodylus mississippiensis* through the lectotype selection made by Mertens (R.) in Annexe 3 to the present paper) ;
 - (c) *mississippiensis* Holbrook (J.E.), 1842, as published in the combination *Alligator mississippiensis* (an Invalid Emendation of *mississippiensis* Daudin, [1801–1802], as published in the combination *Crocodylus mississippiensis*) ;
 - (d) *missisipensis* Gray (J.E.), 1831, as published in the combination *Alligator missisipensis* (an Erroneous Subsequent Spelling for *mississippiensis* Daudin, [1801–1802], as published in the combination *Crocodylus mississippiensis*) ;
- (6) place the under-mentioned family-group name on the *Official List of Family-Group Names in Zoology* : ALLIGATORIDAE Gray (J.E.), 1844 (type genus : *Alligator* Cuvier, 1807).

ANNEXE 1

Replies received from specialists on the question whether it is desirable in the interests of nomenclatorial stability that the name "alligator" Blumenbach, 1779, as published in the combination "*Lacerta alligator*", a possible senior subjective synonym of "*mississippiensis*" Daudin, [1801-1802], as published in the combination "*Crocodilus mississippiensis*", should be suppressed by the International Commission under its Plenary Powers

1. J. Guibé (*Paris*) (30th March 1956)

L'impossibilité d'identifier d'une façon certaine *Lacerta alligator* Blumenbach, 1779, signalée des 1801 par Cuvier (*Archiv fuer Zool. u. Zoot.* p. 169) milite en faveur de la suppression de cette appellation.

2. E. M. Hering (*Berlin*) (26th February 1956)

I transferred your letter of 31st January in the matter of *Alligator* to Dr. Heinz Wermuth, our herpetologist, and he told me that he had answered you direct. He has given me a copy of his letter. I agree with him in all the points made in his letter to you of 23rd February. [See No. 12 below.]

3. Tadeusz Jaczewski (*Warsaw*) (21st February 1956)

I am for the suppression of the specific name *alligator* Blumenbach, 1779, as published in the combination *Lacerta alligator*. The Plenary Powers of the Commission should be used in this case in the interests of stability in nomenclature.

4. Arthur Loveridge (*Cambridge, Mass.*) (10th February 1956)

In view of the menace to a stabilized nomenclature by the questionably composite species *Lacerta alligator* Blumenbach, 1779, I think this name should be suppressed by the International Commission.

5. Robert Mertens (*Frankfurt a.M.*) (27th February 1956)

Im Interesse der Stabilität der Zoologischen Nomenklatur erscheint in der Tat sehr erwünscht, den Namen *Lacerta alligator* Blumenbach, 1779, zu unterdrücken.

6. A. I. Ortenburger (*Norman, Oklahoma*) (21st February 1956)

I am advising "yes" to question (a) . . .

7. H. W. Parker (*London*) (10th February 1956)

The status of *Lacerta alligator* Blumenbach, 1779 does not affect the validity of *Alligator* Cuvier in any way. Whatever it may have been based on, the only possible impact on this genus would be that the name of its type species might have to be changed. I see no point in suppressing the name because of this contingency. My reasons for this standpoint are :—

- (1) To suppress a name because possibly, perhaps, sometime, it might be a nuisance is a very bad principle. It might equally well turn out that to have such an unallocated name was a blessing.
- (2) If it were so suppressed in the light of the evidence now available, might not a reversal be demanded if the evidence eventually proved to be incomplete? There were specimens associated with Blumenbach's name(s) "bei den Exemplaren beder Thiere, die im akademischen Museum . . . befindlich sind . . ." These might be found.

8. J. M. Savage (*Claremont, California*) (19th April 1956)

I would strongly favour suppression of the name *Lacerta alligator* Blumenbach, 1779.

9. Karl P. Schmidt (*Chicago, Ill.*) (17th February 1956)

It is strongly recommended that the *Lacerta alligator* of Blumenbach, 1779, be suppressed as a *nomen dubium*.

10. Hobart M. Smith (*Urbana, Ill.*) (23rd February 1956)

Since Blumenbach's name antedates that of both the Alligator and the Crocodile of North America, its acceptance would unquestionably upset present nomenclature, and thus its suppression is clearly in the interest of nomenclatorial stability.

11. Malcolm Smith (*London*) (2nd March 1956)

I regard *Lacerta alligator* Blumenbach as a *nomen dubium* and consider that it cannot be used.

12. Heinz Wermuth (*Berlin*) (23rd February 1956)

The name *Lacerta alligator* Blumenbach, 1779, should be suppressed as a *nomen dubium* which could endanger the usual name *Alligator mississippiensis* Daudin, [1801-1802].

ANNEXE 2

Replies received from specialists on the question of the interpretation of the nominal species "*Crocodilus (Alligator) lucius*" Cuvier, 1807, and "*Crocodilus mississippiensis*" Daudin, [1801-1802]

1. J. Guibé (*Paris*) (30th March 1956)

Il apparait comme tout à fait certain que l'exemplaire ayant servi à la description de *C. mississippiensis* Daudin [1801-1802] avait été vu précédemment par Cuvier. Non seulement Daudin signale le fait, mais Cuvier (1801, p. 170) fait mention de ce specimen rapporté par Michaux des bords du Mississipi. Il semble que ce même exemplaire a servi à Cuvier (1807, p. 28) pour décrire son *C. lucius*. Cuvier en effet considère comme sans valeur le travail de Daudin (1807, p. 16).

2. E. M. Hering (*Berlin*) (26th February 1956)

For the reply from Dr. Hering see Annexe 1, paragraph 2.

3. Tadeusz Jaczewski (*Warsaw*) (21st February 1956)

We have no herpetologist acquainted with the taxonomy of crocodiles and I am not able to answer this question.

4. Arthur Loveridge (*Cambridge, Mass.*) (10th February 1956)

I can offer no opinion.

5. Robert Mertens (*Frankfurt a.M.*) (27th February 1956)

For Dr. Mertens's contribution see Annexe 3.

6. A. I. Ortenburger (*Norman, Oklahoma*) (21st February 1956)

I am advising "yes" to question (c) . . .

7. H. W. Parker (*London*) (10th February 1956)

The species selected as type species of the subgenus *Alligator* Cuvier, 1827, is the one described by Cuvier under the name *Crocodilus lucius*. The description accompanying this name is based on two specimens, one collected by Michaux and the other, a larger one, sent to Paris by Peale. Michaux's specimen had previously been described by Cuvier (1801, Wiedeman's *Arch. f. Zoolog. & Zootom.* 2, 2, 162-167) as probably representing a new species but was not then named. The species represented by this specimen had previously been named *Crocodilus mississippiensis* Daudin, [1801-1802]; the type (unique) specimen of this name was the same specimen, i.e. the one collected by Michaux.

So, unless it can be shown that Cuvier's *Crocodilus lucius* was a composite (i.e. that Peale's specimen belonged to a different species), the type species of *Alligator* Cuvier is the one named *Crocodilus mississippiensis* by Daudin [1801-1802].

8. J. M. Savage (Claremont, California) (19th April 1956)

The name *Crocodilus mississippiensis* Daudin, [1801-1802], is apparently based upon a single specimen of the American alligator taken by Michaux. This specimen is probably at the Paris Museum. Daudin seems to have had Cuvier's unpublished manuscript at hand when he described this form and points out on page 413 that the diagnosis of this form is from Cuvier. If Cuvier (1807) had only one specimen at hand when he described *lucius* it was most certainly the same example mentioned by Daudin. I have not seen Cuvier's 1807 paper. If more than one specimen was used by Cuvier, we could designate as lectotype the Michaux example. The Commission should check the above data against the original descriptions and, if it has not already done so, should communicate with Dr. J. Guibé at the Paris Museum regarding the Michaux alligator.

Daudin's allocation at the suggestion of Cuvier, of *Crocodilus mississippiensis* to the group containing the caimans and his description seem to clinch the matter. The Michaux specimen from "les bords du Mississipi" could only be the genus *Alligator* and not the crocodile of the southern United States, *Crocodilus acutus*. This could of course be confirmed by an examination of the Michaux specimen, if it still exists.

9. Karl P. Schmidt (Chicago, Ill.) (17th February 1956)

The identification of *Crocodilus lucius* Cuvier, 1807, with *Crocodilus mississippiensis* Daudin, [1801-1802], is unequivocal.

10. Hobart M. Smith (Urbana, Ill.) (23rd February 1956)

I cannot verify conspecificity of *C. lucius* Cuvier and *C. mississippiensis* Daudin, since I do not have the latter available, but I can point out that these have been accepted as conspecific for at least 75 years, and to construe otherwise would provide for nomenclatorial instability.

11. Malcolm Smith (London) (2nd March 1956)

Crocodilus lucius Cuvier and *C. mississippiensis* Daudin are based on firm foundations and are valid.

12. Heinz Wermuth (Berlin) (23rd February 1956)

The species *Crocodilus lucius*, described by Cuvier, 1807, with a clear North American type locality and as a member of the simultaneously erected group *Alligator*, cannot be any other crocodile than *Alligator mississippiensis* (Daudin), which exists as the only species of the family ALLIGATORIDAE in North America. By this reason the identity of *Crocodilus lucius* Cuvier and *Alligator mississippiensis* seems clear to me. Merely a future discovery of a second species of the ALLIGATORIDAE in North America would be a conceivable counter-argument, but surely this will never be the case!

ANNEXE 3

Der Holotypus von "*Crocodylus mississippiensis*" Daudin [1801–1802], ist der Lectotypus von "*Crocodylus lucius*" Cuvier (G.), 1807.

Von ROBERT MERTENS

Es liegt meist im Interesse der Stabilität und Eindeutigkeit der zoologischen Namen, wenn die Synonyma nicht subjektiv, sondern objektiv sind: d.h. wenn sie bei den Genera die gleichen Species als Genotypen, bei Species die gleichen Stücke als Specietypen haben. Aus Gründen, welche die Internationale Kommission der Zoologischen Nomenklatur dargelegt hat, halte ich es für sehr erwünscht, wenn der Genotypus von *Alligator* Cuvier, 1807 (*Ann. Mus. Hist. nat.*, Paris 10 : 25), nämlich *Crocodylus lucius* Cuvier (l. c. : 28), der bisher als ein subjektives Synonym von *Crocodylus mississippiensis* Daudin [1801–1802] (*Hist. nat. gén. partic. Rept.* 2 : 412, 1801) galt, zu einem objektiven Synonym des letzteren wird.

Das ist durch die Wahl des Typus von *lucius* ohne weiteres möglich. Daudin hat seinen *Crocodylus mississippiensis* auf ein einzelnes Stück des Musée d'Histoire Naturelle in Paris begründet, das der Botaniker Michaux von den Ufern des Mississippi [sic] mitgebracht hat. Somit ist dieses Stück, das sich nach brieflicher Mitteilung von Dr. Jean Guibé an Mr. Hemming im Pariser Museum* befindet, der Holotypus von *mississippiensis*. Dieses Stück war bereits Cuvier (1801, Wiedemann's *Arch. Zool. Zoot.* 2 : 170) bekannt. Es wird von Cuvier später (1807) auch bei der Beschreibung seines *lucius* erwähnt, und zwar an erster Stelle; es kann kein Zweifel darüber sein, dass es bei der Beschreibung von *lucius* vorlag. Wenn auch Cuvier dabei noch ein weiteres (von Peale eingeschicktes) Stück von *lucius* aufzählt, so erscheint es mir am richtigsten, das Michaux'sche Stück, d.h. den Holotypus von *mississippiensis*, auch zum Lectotypus von *lucius* zu bestimmen: dadurch bleibt nämlich der Genotypus von *Alligator* für alle Zeiten eindeutig mit dem allbekannten Namen *mississippiensis* in Verbindung. Diese Festlegung des Lectotypus von *lucius* in dem oben erwähnten Sinne erfolgt auf berechtigten Wunsch von Mr. Hemming.

* For the letter here referred to by Professor Mertens, see Annexe 2(1).

PROPOSED ACCEPTANCE OF "LESTODIPLOSIS" AS THE VALID ORIGINAL SPELLING FOR THE GENERIC NAME SPELLED BOTH IN THIS WAY AND AS "LEPTODIPLOSIS" BY KIEFFER IN 1894 (CLASS INSECTA, ORDER DIPTERA)

By **D. ELMO HARDY**

(Department of Zoology and Entomology, University of Hawaii, Honolulu,
Hawaii)

(Commission's reference : Z.N.(S.) 1078)

The object of the present application is to ask the International Commission on Zoological Nomenclature in the interest of stability in nomenclature to give a Ruling as to which of the Original Spellings *Lestodiplosis* and *Leptodiplosis* is to be accepted as the Valid Original Spelling for the generic name published with the above spellings by Kieffer in 1894 (Class Insecta, Order Diptera).

2. The foregoing generic name was introduced by Kieffer in the *Bulletin de la Société entomologique de France* for the year 1894. It appeared in two different sets of notes. In the first it appeared (: 28) with the spelling *Leptodiplosis*; in the second (: 280) with the spelling *Lestodiplosis*. The two sets of notes appeared in the same number of the *Bulletin*. The type species of this genus is *Lestodiplosis septemguttata* Kieffer, 1894 (*Bull. Soc. ent. France* 1894 : 280) by original designation.

3. It is clear that the spelling *Lestodiplosis* was that intended by Kieffer, for he used this spelling consistently in all his subsequent publications relating to the gall fly midges. This spelling was used by him in several papers published in 1895. The first of these was published in January 1895 (*Wien. ent. Z.* 15 : 2, 13, 14) and it appears that this was the first use of either spelling subsequent to the original publication of this name in the previous year.

4. The spelling *Leptodiplosis* was employed without any reference to the spelling *Lestodiplosis* by Coquillett in 1910 (*Proc. U.S. nat. Mus.* 37: 559). Neave also in 1939 (*Nomencl. zool.* 2: 925) cited this name as "*Lestodiplosis* "err. pro *Lepto*- Kieffer, 1894". Subject to these isolated exceptions, the spelling *Lestodiplosis* has been used consistently throughout the taxonomic literature of the family CECIDOMYIIDAE.

5. Although, as explained in paragraph 3 above, it is likely that the spelling *Leptodiplosis* was the result of an inadvertent error, there is no clear evidence that this is so, and in consequence, the Valid Original Spelling under the Rules

prescribed by the Copenhagen Congress (1953, *Copenhagen Decisions zool. Nomencl.* 43-44, Decision 71(1)(a)(ii)) is "that one of the Original Spellings used by the *First Subsequent User* of the name". As shown above (paragraph 3) Kieffer in his paper of January 1895 was himself the "First Subsequent User" of this generic name. Accordingly, as he then used the spelling *Lestodiplosis*, that spelling is the Valid Original Spelling. In order to prevent any mis-conceived usage of the spelling *Leptodiplosis* by future authors, the Commission is now asked to give a Ruling that for the reasons explained above the spelling *Lestodiplosis* is the Valid Original Spelling for this generic name.

6. The genus *Lestodiplosis* Kieffer which, as stated in paragraph 4 above, belongs to the family CECIDOMYIIDAE, has not been taken as the base for the name of a family-group taxon below the family level. Accordingly, no family-group-name problem arises for consideration in the present case.

7. The proposal now laid before the International Commission on Zoological Nomenclature is that it should :—

- (1) give a Ruling that of the two Original Spellings *Lestodiplosis* and *Leptodiplosis* Kieffer, 1894 (Class Insecta, Order Diptera) the Valid Original Spelling is *Lestodiplosis*, in view of the fact there is no clear evidence that either of the above spellings was the result of an inadvertent error and that the above was the spelling used by the First Subsequent User (Kieffer, January 1895);
- (2) place the under-mentioned generic name *Lestodiplosis* Kieffer, 1894 (gender : feminine) (type species, by original designation : *Lestodiplosis septemguttata* Kieffer, 1894);
- (3) place the under-mentioned specific name on the *Official List of Specific Names in Zoology* : *septemguttata* Kieffer, 1894, as published in the combination *Lestodiplosis septemguttata* (specific name of type species of *Lestodiplosis* Kieffer, 1894);
- (4) place the under-mentioned generic name on the *Official Index of Rejected and Invalid Generic Names in Zoology* :—*Leptodiplosis* Kieffer, 1894 (an Invalid Original Spelling for *Lestodiplosis*).

PROPOSED USE OF THE PLENARY POWERS TO VALIDATE
THE GENERIC NAME "CAMPSICNEMUS" HALIDAY, 1851
(CLASS INSECTA, ORDER DIPTERA)

By D. ELMO HARDY

(Department of Zoology and Entomology, University of Hawaii, Honolulu,
Hawaii)

(Commission's reference : Z.N.(S.) 1080)

The object of the present application is to ask the International Commission on Zoological Nomenclature to validate the long-established generic name *Campsicnemus* Haliday, 1851 (Class Insecta, Order Diptera). The facts of this case are set in the following paragraphs.

2. In 1832 (*Zool. J.* 5(19) : 357) Haliday established the nominal genus *Camptosceles*. He did not designate a type species for this genus but the first of the included species, *Dolichopus scambus* Fallén, 1823 (*Mon. Dolichop. Svec.* (3) : 19) was selected as the type species by Coquillet in 1910 (*Proc. U.S. nat. Mus.* 37 : 518).

3. In 1851 (*in* Walker's *Ins. Brit.*, Diptera 1 : 187) Haliday replaced the name *Camptosceles* Haliday, 1832, by the new name *Campsicnemus*, because he regarded that name as a junior homonym of *Camptoscelis* Dejean, 1828 (*Spec. gén. Coléopt.* 3 : 430). Again Haliday did not designate a type species but in 1910 Coquillet (*loc. cit.* 37 : 518) selected the second of Haliday's species, *Dolichopus curvipes* Fallén, 1823 (*Mon. Dolichop. Svec.* (3) : 20) to the type species of *Campsicnemus* Haliday.

4. Under the *Règles* a generic name is not to be treated as a homonym of another such name differing from it only in termination (Article 36) and this provision was underlined and generalised in 1953 when the Fourteenth International Congress of Zoology inserted in the *Règles* a provision that "a generic name is not to be treated as a homonym of another such name if it differs from it in spelling by even one letter" (1953, *Copenhagen Decisions zool. Nomencl.* : 78, Decision 152). It will be seen therefore that the name *Camptosceles* Haliday, 1832, is not a homonym of *Camptoscelis* Dejean, 1828, that it is accordingly an available name and that the name *Campsicnemus* Haliday, 1851, is invalid as a junior objective synonym of *Camptosceles* Haliday, 1832.

5. In the mistaken belief that *Camptosceles* Haliday was not an available name, the name *Campsicnemus* Haliday, 1851, has been consistently used in the dolichopodid literature for over a hundred years. The genus concerned is widespread throughout the world. It contains about one hundred known species, over half of them occurring in Hawaii. This group represents over 60 per cent. of the Hawaiian dolichopodid fauna. There are over fifty undescribed species at hand. There can be no doubt that the best interests of stability would be served by maintaining the generic name *Campsicnemus* Haliday and that no advantage would be served by abandoning the practice of a century through re-introducing the almost completely unused and now virtually forgotten name *Camptosceles* Haliday, 1832.

6. Under Rule (f) in Article 30 where one nominal genus is replaced by another (as was done in this case) the two genera automatically take the same species as type species and the designation, indication or selection of a type species for either nominal genus automatically makes the species so designated, indicated or selected the type species also of the other nominal genus concerned. Coquillet (1910) was therefore in error when he sought to select different species to be the type species respectively of *Camptosceles* Haliday, 1832, and *Campsicnemus* Haliday, 1851. The species (*Dolichopus scambus* Fallén, 1823) selected by Coquillet as the type species for the original genus should therefore be accepted as the type species also of *Campsicnemus* Haliday, 1851.¹

7. The generic names discussed above have not been taken as the base for the names of family-group taxa and in consequence no family-group-name problem arises in the present case. The genus to which these names have been applied is, as has already been indicated, currently referred to the family DOLICHOPODIDAE (correction of DOLICHOPIDAE) Latreille, 1807, for the addition of which to the *Official List of Family-Group Names in Zoology* a proposal is already before the International Commission in connection with a different application (Hemming, 1955, *Bull. zool. Nomencl.* 11 : 79-81)¹.

8. In the light of the considerations set out above, the International Commission on Zoological Nomenclature is asked :—

- (1) to use its Plenary Powers to suppress the under-mentioned generic name for the purposes of the Law of Priority but not for those of the Law of Homonymy :—*Camptosceles* Haliday, 1832 ;
- (2) to place the under-mentioned generic name on the *Official List of Generic Names in Zoology* :—*Campsicnemus* Haliday, 1851 (gender : feminine) (type species by selection by Coquillet (1910) : *Dolichopus scambus* Fallén, 1823) ;

¹ The proposal here referred to has since been approved by the International Commission on Zoological Nomenclature, whose decision on this matter has been embodied in *Direction* 49 (now in the press).

(3) to place the under-mentioned specific names on the *Official List of Specific Names in Zoology* :—

(a) *scambus* Fallén, 1823, as published in the combination *Dolichopus scambus* (specific name of type species of *Campsicnemus* Haliday, 1851);

(b) *curvipes* Fallén, 1823, as published in the combination *Dolichopus curvipes*;

(4) to place the generic name specified in (1) above as there suppressed under the Plenary Powers on the *Official Index of Rejected and Invalid Generic Names in Zoology*.

**SUPPORT FOR THE PROPOSAL BY MR. E. A. ELLIS TO VALIDATE
THE GENERIC NAME "UNIO" PHILIPSSON, 1788 (CLASS PELECYPODA)**

By C. O. van REGTEREN ALTENA

(*Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands*)

(Commission Reference : Z.N.(S.) 451)

(Letter dated 16th July 1956)

(For the proposal in this case see *Bull. zool. Nomencl.* 11 : 341-343)

Mr. E. A. Ellis sent me a reprint of his paper in the *Bulletin*, in which he asks the International Commission on Zoological Nomenclature to validate the currently accepted usage of the generic name *Unio* Philipsson, 1788. I think that the propositions made under para. 11 of this paper are all very sound, and will avoid confusion in the use of some often used generic names of Mollusca.

PROPOSAL RELATING TO THE GENERIC NAME "ACINACES" AGASSIZ, 1846 (CLASS PISCES) SUPPLEMENTARY TO MR. D. W. TUCKER'S APPLICATION IN REGARD THERETO, DESIGNED TO PROTECT THE GENERIC NAME "ACINACES" GERSTAECKER, 1858 (CLASS INSECTA, ORDER COLEOPTERA)

By **J. BALFOUR-BROWNE, M.A.**
(*British Museum (Natural History), London*)

(Commission Reference : Z.N.(S.) 923)

(For Mr. Tucker's application, see 1955, *Bull. zool. Nomencl.* 11 : 285-288)

My attention has been drawn to an application at present before the International Commission submitted by Mr. D. W. Tucker under the Reference Number Z.N.(S.) 923 for the purpose of validating the name *Gempylus* Cuvier, 1829 (Class Pisces) (1955, *Bull. zool. Nomencl.* 11 : 285-288). For the reasons set out below I am submitting the present supplementary application for the purpose of protecting the generic name *Acinaces* Gerstaecker, 1858 (*Monogr. Endomych.* : 178) (Class Insecta, Order Coleoptera), the future status of which is involved in Mr. Tucker's application.

2. In the above application Mr. Tucker asks for the suppression by the International Commission of the generic name *Acinacea* Bory de St. Vincent, 1804, and its invalid emendation *Acinaces* Agassiz, 1846. At the same time he points out the latter name is a senior homonym of the name *Acinaces* Gerstaecker, 1858, in Coleoptera. Under a Directive issued by the International Congress of Zoology, where a name is suppressed solely for the purpose of permitting the usage of a later name for the same taxon, the suppression is to be limited to suppression for the purposes of the Law of Priority and is not to affect the status of the name concerned for the purposes of the Law of Homonymy. Accordingly, in the present case Mr. Tucker asks that the generic names proposed by Bory de St. Vincent and Agassiz respectively should be suppressed for the purposes of the Law of Priority but not for those of the Law of Homonymy.

3. It is recognised that the procedure prescribed by the Congress in this matter serves a valuable purpose by preventing a name which has been rejected in one group as a junior homonym of a name in some other group from being suddenly validated by the suppression of the senior homonym under the Commission's Plenary Powers. In the present case, however, the foregoing

procedure would cause unnecessary name-changing in the Order Coleoptera in which the name *Acinaces* Gerstaecker, 1858, though (as shown by Mr. Tucker) invalid as a junior homonym of *Acinaces* Agassiz, 1846, has been in continuous use for nearly one hundred years.

4. The nominal genus *Acinaces* Gerstaecker, 1858, was proposed to include four previously undescribed species, of which one was *Acinaces lebasii* Gerstaecker, 1858 (: 179). No type species was designated by Gerstaecker and none was selected by any subsequent author until in 1953 (*in Wytsman's Genera Ins.* 210: 85) Professor H. F. Strohecker of the University of Miami, the specialist in this group in the United States, so selected the species specified above. There is no junior synonym of *Acinaces* Gerstaecker and accordingly if that name were to remain a junior homonym of *Acinaces* Agassiz, it would be necessary not only to abandon the practice of a century but in addition to publish an entirely new name for this genus. It is accordingly proposed that the opportunity presented by Mr. Tucker's application should be taken for regularising the position of the generic name *Acinaces* Gerstaecker by expanding Mr. Tucker's proposal in regard to the name *Acinaces* Agassiz, 1846, so as to provide for its suppression for the purposes of the Law of Homonymy as well as for those of the Law of Priority.

5. The generic name *Acinaces* Gerstaecker has not been taken as the base for a family-group name and accordingly no family-group-name problem arises in this case. This genus is currently placed in the family ENDOMYCHIDAE.

6. For the reasons set forth above I now submit to the International Commission the following as an application supplementary to that already submitted by Mr. Tucker, namely :—

- (1) that the proposal for the suppression of the generic name *Acinaces* Agassiz, 1846, under the Commission's Plenary Powers submitted by Mr. D. W. Tucker in paragraph 10(1)(a) of his application Z.N.(S.) 923 (*Bull. zool. Nomencl.* 11 : 287) be extended to include such suppression for the purposes of the Law of Homonymy as well as suppression for the purposes of the Law of Priority ;
- (2) that the under-mentioned generic name be placed on the *Official List of Generic Names in Zoology* : *Acinaces* Gerstaecker, 1858 (gender : masculine) (type species, by selection by Strohecker (H.F.) (1953) : *Acinaces lebasii* Gerstaecker, 1858) ;
- (3) that the under-mentioned specific name be placed on the *Official List of Specific Names in Zoology* :—*lebasii* Gerstaecker, 1858, as published in the combination *Acinaces lebasii* (specific name of type species of *Acinaces* Gerstaecker, 1858).

COMMENTS ON APPLICATION BY JOSHUA L. BAILY, JR., REGARDING
THE PRESERVATION OF THE GENERIC NAME "TURBINELLA"
LAMARCK, 1799, AS THE NAME FOR THE SACRED CHANK SHELL OF
INDIA

(a) By Dr. A. ZILCH, Professor Dr. R. MERTENS and Dr. O. KRAUS
(All of Senckenbergische Naturforschende Gesellschaft)

(Commission Reference : Z.N.(S.) 383)

(For the proposal submitted see *Bull. zool. Nomencl.* 11 : 330-332)

(Letter dated 17th May 1956)

Zu dem Antrag von J. L. Baily (Z.N.(S.) 383) "Proposed use of the Plenary Powers to preserve the generic name *Turbinella* Lamarck, 1799, as the name for the Sacred Chank Shell of India" möchte ich Ihnen folgende Stellungnahme übermitteln :

Der Name *Turbinella* Lamarck, 1799, ist jüngeres, objektives Synonym von *Xancus* Röding, 1798. *Turbinella* ist mehr als hundert Jahre in Gebrauch gewesen. Im Jahre 1926 (*Opinion* 96) erklärte die Kommission die Namen Röding's (1798) in *Museum Boltenianum* für nomenklatorisch verfügbar. Hierdurch musste der alte Name *Turbinella* Lamarck durch *Xancus* Röding ersetzt werden.

Xancus ist inzwischen in Gebrauch gekommen und auch in die führenden Handbücher (1931 Thiele : 342 ; 1943 Wenz : 1301) eingegangen. Wir halten es deshalb für verfehlt, den Namen *Xancus* Röding, 1798, jetzt noch, nach 30-jähriger Gültigkeit, zu unterdrücken und damit ausserdem die in *Opinion* 96 getroffene Entscheidung der Kommission zu durchbrechen.

(b) By MARIAN W. SMITH

(Joint Hon. Secretary, Royal Anthropological Institute of Great Britain and Ireland)

(Letter dated 15th June 1956)

The Royal Anthropological Institute has referred the question of the name *Turbinella* as the name for the Sacred Chank Shell of India to five of its leading Fellows, and the matter was also raised at its last Council meeting on 7th June.

The consensus of opinion seems to be that considerable confusion might result from any strict application of a rule establishing the name *Xancus*. An application to validate the name *Turbinella* Lamarck is suggested. Not only has the name been widely used for a century, but it is the one under which the species is known in practically all literature.

The name is used by professional conchologists, by anthropologists and pre-historians, and a change would inevitably lead to the assumption that a different species was under discussion. A rather awkward alternative would be to recommend the continued use of *Turbinella*, placed in brackets after *Xancus*.

REQUEST FOR A RULING AS TO THE RELATIVE PRIORITY TO BE
ACCORDED TO THE NAMES "CHEIRODON AXELRODI" SCHULTZ,
1956, AND "HYPHESOBRYCON CARDINALIS" MYERS AND
WEITZMAN, 1956 (CLASS PISCES)

By L. W. ASHDOWN

(Editorial Department, "Water Life", London)

(Commission Reference : Z.N.(S.) 1082)

Letter dated 14th May 1956

I shall be grateful if the International Commission will give a ruling on the question of which of two recently published names should be applied to a newly described Characin. I should explain that what is apparently the same species has been described by Dr. L. P. Schultz as *Cheirodon axelrodi* in the April 1956 number of the *Tropical Fish Hobbyist* (pages 41/43) and, we understand, by George S. Myers and S. A. Weitzman as *Hyphessobrycon cardinalis* in No. 1 of Vol. 7 of the *Stanford Ichthyological Bulletin*. The same fish had been described in the February 1956 issue of *The Aquarium* by W. T. Innes, where it was stated that the fish had still to be classified, and it was given the popular name of "Cardinal Tetra" pending the publication of a scientific name for it.

The issue of the *Tropical Fish Hobbyist* for April 1956 is dated on the first page (page 3) "February 20, 1956", while the issue of the *Stanford Ichthyological Bulletin* referred to above is, we believe, dated "February 21, 1956". It is impossible without a ruling from the Commission to determine which of the two names previously mentioned should take priority over the other since the Commission alone is in a position to obtain the relevant information.

This fish is likely to become widely used by aquarists, and it is important therefore that the scientific name to be used for it should be determined without delay. I accordingly ask the International Commission to look into this matter, and to give a ruling on it as soon as possible.

PROCEDURE ADOPTED FOR DEALING WITH MR. L. W. ASHDOWN'S REQUEST FOR A RULING AS TO THE RELATIVE PRIORITY TO BE ACCORDED TO THE NAMES "CHEIRODON AXELRODI" SCHULTZ, 1956, AND "HYPHESOBRYCON CARDINALIS" MYERS AND WEITZMAN, 1956 (CLASS PISCES)

By FRANCIS HEMMING, C.M.G., C.B.E.

(Secretary to the International Commission on Zoological Nomenclature)

(Commission Reference : Z.N.(S.) 1082)

(For Mr. Ashdown's proposal see *Bull. zool. Nomencl.* 12 : 184)

Attention is drawn to the request submitted by Mr. L. W. Ashdown (*Editorial Department, "Water Life"*) for a Ruling as to the relative priority to be accorded to two names for the same species of fish which appear to have been published almost simultaneously in the early part of 1956. The names concerned are (a) *Cheirodon axelrodi* Schultz, published in Part 4 of volume 4 of the serial publication *Tropical Fish Hobbyist*, a Part which on the wrapper bears the date "April 1956" and on the first page of the text (:[3]) the date "February 20, 1956" and (b) *Hypphesobrycon cardinalis* Myers and Weitman, published in Part 1 of volume 7 of the serial publication *Stanford Ichthyological Bulletin* (a serial publication published by the Natural History Museum of Stanford University) a Part bearing the date "February 21, 1956".

2. The answer to be returned to the question submitted in this case will depend on the evidence furnished by the parties concerned as to the dates on which the Parts of these serial publications referred to above were respectively "published", the term "published" being interpreted in the manner prescribed by the International Congress of Zoology, Paris, 1948 (1950, *Bull. zool. Nomencl.* 4 : 223-225).

3. As both the names concerned are new and neither has as yet established itself in the literature, special priority for publication in the *Bulletin of Zoological Nomenclature* has been accorded to Mr. Ashdown's application in order that the International Commission may be in a position to give a Ruling in this matter at the earliest possible date.

4. In order to assist the International Commission in arriving at a decision on this question a request for full information as to the date of publication, as defined by the International Congress of Zoology, of the respective Parts of the serial publications concerned was addressed as a matter of urgency to the Editor of the *Tropical Fish Hobbyist* and to the Editor of the *Stanford Ichthyological Bulletin*. The replies received are given in Annexes 1 and 2 to the present note.

ANNEXE 1

Reports on the date of publication of the name "*Cheirodon Axelrodi*"
Schultz, 1956

- (a) Letter dated 23rd May 1956 from Leonard P. Schultz, Smithsonian Institution, U.S. National Museum, Washington, D.C., U.S.A.

Thanks for your letter of May 16, 1956 (Z.N.(S.) 1082) concerning relative priority of *Cheirodon axelrodi* Schultz and *Hyphessobrycon cardinalis* Myers and Weitzman.

Mr. Axelrod sent to me on March 6, 1956 the U.S. Post Office receipt for the mailing of the March-April issue of *Tropical Fish Hobbyist* and it is in my files, a photographic copy of which I could furnish if needed by the Commission. It contains the following information which I quote :—

" Jersey City, N.J.
Tropical Fish Hobbyist
2/20-24/56 and 3/2-3-5/56
Mar.-April-1956
Total pounds mailed 1514
Computed by T. Falconer "

The first date of mailing was on February 20, 1956 as shown by the above receipt. This is verified by the postmark on the folder in which my copy of the April issue of T.F.H. arrived. I quote : " Jersey City, N.J., February 20, 1956, P.B. Meter 333294, U.S. Postage 05 ".

Mr. Axelrod mailed to me on February 18th a printed tear sheet from the T.F.H. magazine of the description of *Cheirodon axelrodi* Schultz, which I received at 9.00 a.m. on February 20 1956.

I received a letter from Dr. George S. Myers which bore the date of February 16, 1956, as originally typed, but which had been re-dated as February 21, 1956 by Professor Myers in his hand-writing. He stated in long hand which I quote : " Dear Leonard : Copies of our latest Stan. Ichth. Bulletin just came in so I am enclosing your copy with this. There is a new aquarium tetra in it, GSM ". " P.S. I didn't get back to the office for several days to sign this. Thus change in date ". The rest of the letter was typed but about other matters. Enclosed in the letter was the printed description of *Hyphessobrycon cardinalis* Myers and Weitzman, also dated February 21, 1956. The envelope in which the letter and Stanf. Ichth. Bull. Vol. 7, no. 1 were enclosed were postmarked " Stanford, Calif., Feb. 21, 1956, 12.30 p.m.", which I have in my files. It was received February 23, 1956.

(b) Letter dated 23rd May 1956 from Herbert R. Axelrod, Editor,
Tropical Fish Hobbyist Magazine

This will acknowledge receipt of your letter dated May 16 1956 relative to the priority of the names *Cheirodon axelrodi* Schultz and *Hyphessobrycon cardinalis* Myers & Weitzman.

I shall answer your queries according to (a), (b) and (c) as outlined in your letter.²

(a) The magazine *Tropical Fish Hobbyist* which bears the cover date April 1956 was printed on February 17th and 18th. Some copies were distributed on that date to pet shops in our neighbourhood. General mailing started on February 20th and continued for a week or so. This information was verified by Myers, Innes and Dr. Schultz. I am enclosing the story which appeared in the next issue of our magazine explaining this procedure.

(b) First copies went to the post office on February 20th. There were about 3,000 copies mailed on this date.

(c) 6,718 copies were distributed between February 20th and May 4th.

Verification of this information is available from the Postmaster, Jersey City 2, N.J. He has the records of mailing this issue.

Enclosure to letter dated 23rd May 1956 from Herbert R. Axelrod

Extract from pp. 16 and 17 of the issue of the serial publication " Tropical Fish Hobbyist " for May-June 1956

In the last issue of T.F.H., Dr. Schultz kindly named this beautiful fish *Cheirodon axelrodi* in my honor. I am, naturally, quite proud of this fact, especially since it is one of the most beautiful fishes I've ever seen. The story behind the scenes is a very interesting one and as a matter of record I'll tell you about it.

On February 10th or 11th the beautiful Scarlet Characins were brought to my attention by several of my friends. Sol Kessler, a fish dealer in a nearby New Jersey town, was kind enough to give Bill Vorderwinkler a few specimens. I had Timmerman take a few color pictures of them, then sent them down to Dr. Schultz for identification. While this was going on, I held up printing T.F.H. until I heard

⁽²⁾ The queries here referred to by Mr. Axelrod are those contained in my letter to him of 16th May 1956 which were as follows :—

(a) The date on which were available the first copy or copies of the issue of the *Tropical Fish Hobbyist* which bears the date " April, 1956 " on the cover and the date " February 20, 1956 " on page 3 ;

(b) The date on which the first copies of the above number were distributed to subscribers and the number of copies so distributed ;

(c) If not all subscribers' copies were distributed on the date referred to in (b) above, the date on which the remaining copies were distributed and the number of such copies. (intld. F.H. 6th June 1956.)

from Schultz. I called him in Washington nearly every day until finally he said that he thought it was a new species and was naming it after me. He said it would take another day or two to write it up but he would send the manuscript up special delivery. On the morning of February 16th I received the manuscript . . . three hours later I had the pages set in type and the proofs were in the mail to Dr. Schultz. We received Dr. Schultz's corrections back the next day but by that time we were printing the magazine already, so we made the corrections as best we could on the plate. We mailed the first copies of the magazine on February 20th, as the records of the post office will verify (Innes and Myers both checked them!).

Now Dr. Schultz is a very finicky guy! When I sent him the fish he wanted an exact location for the "type locality". He doesn't believe in general areas . . . he wants THE place. I knew that Fred Cochu and his father-in-law, Herr Schnelle of Paramount Aquarium, were probably the only two white men to know the exact locale and I further know that they wouldn't be fools enough to tell me or anyone else! This fish was worth thousands of dollars and when others found out where they were getting the Neons from, the market was killed and Neons were and still are selling for a price lower than that of White Clouds! They didn't want the same thing to happen to this fish.

I asked a very good friend of mine, Mr. Mervin Roberts, to ask Schnelle where the fish comes from. Schnelle and Roberts are close associates. Roberts could not get a specific locale from Schnelle. Then I remembered a man who used to collect fish in that region.

I told him the story . . . he told me where the fish come from (north of Porto Velho on the Rio Madera). He knew the exact area . . . even told me how to get there by plane. Take a four engine plane to Manaus, then a small seaplane to Porto Velho. Later I learned that Schnelle had reported to Myers that the fish came from near Manaus. Myers should have known better than to believe that for two reasons:

1. Paramount Aquarium make their living selling tropical fish. They don't want every importer to have the fish that they now have exclusively.
2. The waters near Manaus have been combed for many years for lots of fishes. Why hadn't this beautiful species turned up before?

Myers wrote to Kessler and others trying to get information that he should have written to me or Schultz about . . . Innes did the same thing! Why?

Anyway, the fish I sent to Schultz were all females. The balance I sent to Tutwiler in Florida and to Bill Vorderwinkler to see if they could spawn them. I am trying to spawn them myself . . . nothing yet.

The fish are very hardy and healthy. They are not easily killed by diseases, nor do they succumb to the ich very readily (other fishes in the same aquarium got the ich, but not these beauties!) Schultz, who hasn't seen a male yet, suggests that males might have the characin hook on their anal fins. I looked and couldn't find any on the specimens I have . . . maybe they are all females? In the interests of ichthyology and tropical fishkeeping, I am offering, through T.F.H., a reward of \$50.00 for the exclusive rights to the publication of the first detailed spawning report of *Cheirodon axelrodi*. The report must be verified by three people or a month old baby fish must be sent along as proof. If photographs of the spawning sequence can be taken, we'll pay an additional \$10 for each reproducible photograph.

ANNEXE 2

Report on the date of publication of the name "Hyphessobrycon cardinalis" Myers and Weitzman, 1956

**Letter dated 23rd May, 1956 from Margaret H. Storey, Associate Editor,
Stanford Ichthyological Bulletin**

In reply to your letter of 16th May 1956,³ may I state that Prof. G. S. Myers is Editor of the *Stanford Ichthyological Bulletin*. However, as Associate Editor, my duties include direct dealing with the printers (Stanford University Press) and with the posting of each number of this serial. It is my responsibility that the greater part of each issue be in the mails on or before the publication date, which invariably appears just below the masthead of each number.

I followed my usual procedure when I addressed and mailed volume 7, no. 1 of the *Stanford Ichthyological Bulletin*, dated February 21 1956 and hereby affirm :

1. That the entire edition of this number was delivered to me by the Stanford University Press on the morning of February 21 1956.

2. That, envelopes having been addressed while the issue was in press, approximately 600 copies in individual envelopes were mailed by me at Stanford Post Office, at approximately 11.30 a.m. on February 21, 1956 by regular second class mail, and that six or seven additional copies were mailed by me at the same time by first class airmail, in individual envelopes provided by Professor Myers.

3. That this mailing included all current names and addresses on the regular mailing list maintained by the Natural History Museum for S.I.B. and that the mailing list had been brought up to date between November 1955 and February 1956 by means of reply-paid return post cards—regular U.S. double post cards to the United States, and Universal Postal Union Reply Paid Return Post Cards to other countries. Copies of vol. 7, no. 1 were sent only to those who had replied.

4. That this mailing list included the principal zoological ichthyological, or natural history museum libraries in Ann Arbor, Berkeley, Cambridge, Mass., Chicago, Honolulu, New Haven, New York, Philadelphia, San Francisco, Washington, Berlin, Calcutta, Cape Town, Copenhagen, La Plata, Leningrad, London, Paris, Rio de Janeiro and Sydney, and many other cities in a total of 58 countries throughout the world, the Editors of "Science" and "Nature", numbering in all, 258; and approximately 335 individual ichthyologists throughout the world.

5. That this number was available through public sale from the Director of this Museum, upon the morning of February 21, 1956.

³ The letter here referred to by Miss Storey contained the same questions as those set out in Mr. Hemming's letter to Mr. Axelrod of the same date. These have been given in Footnote 1 above.

6. That approximately 350 additional copies of this number were delivered to the Gift and Exchange Department of the Stanford University Library on February 21, 1956, to be used by them for exchanges with 282 libraries of institutions, in 52 countries, with which the Natural History Museum Library does not directly exchange. The Stanford Library distributed 282 copies during the month of March.

7. That a number of post card receipt notices have been received by us from institutions and individuals, showing that this number of the Bulletin was received without undue delay in many widely scattered parts of the world. (Unfortunately, almost no persons or institutions in North America or Western Europe commonly send us such receipts.)

8. That February 21, 1956 fell on a Tuesday, followed by a legal national holiday (Washington's Birthday, Feb. 22), so that no copies sent to any great distance and delivered by the United States mails could have been delivered until February 23. (I am told by Professor Myers that several persons on the Atlantic Seaboard, approximately 3,000 miles from Stanford, received airmail copies on February 23.)

I trust that the above will be satisfactory.

**SUPPORT FOR MR. J. BALFOUR-BROWNE'S PROPOSAL FOR THE
VALIDATION OF THE GENERIC NAME "ACINACES" GERSTAECKER,
1858 (CLASS INSECTA, ORDER COLEOPTERA)**

By **H. F. STROHECKER**

(Department of Zoology, University of Miami, Coral Gables, Florida, U.S.A.)

(Commission Reference : Z.N.(S.) 923)

(Letter dated 30th April 1956)

(For the proposal submitted see 1956, *Bull. zool. Nomencl.* 12 : 181-182)

I wish to communicate to you my concurrence in Mr. J. Balfour-Browne's proposal that the generic name *Acinaces* Gerstaecker, 1858 (type species, by selection by myself (1953) : *Acinaces lebasii* Gerstaecker, 1858) be placed on the *Official List of Generic Names in Zoology* and that the name *lebasii* Gerstaecker, as the specific name of the type species of the above genus, be placed on the *Official List of Specific Names in Zoology*.

**PROPOSED REJECTION FOR NOMENCLATORIAL PURPOSES
OF WALCH (J.E.I.), 1768-1774, "DIE NATURGESCHICHTE DER
VERSTEINERUNGEN ZUR ERLÄUTERUNG DER KNORRISCHEN
SAMMLUNG VON MERKWÜRDIGKEITEN DER NATUR",
NÜRNBERG**

By **L. R. COX**, M.A., Sc.D., F.R.S.
(*British Museum (Natural History), London*)

(Commission Reference : Z.N.(S.) 1121)

The object of the present application is to ask the International Commission on Zoological Nomenclature to reject for nomenclatorial purposes the work by Walch (J.E.I.) published at Nürnberg in the years 1768-74 under the title "Die Naturgeschichte der Versteinerungen zur Erläuterung der Knorrischen Sammlung von Merkwürdigkeiten der Natur".

2. The problem presented by Walch's "Naturgeschichte" recently came into the light in the course of the preparation of an application which it is hoped to submit shortly to the Commission in regard to the family name to be used for the genus *Harpa* (Z.N.(S.) 1119). It was found that in two modern standard works (Thiele (J.), 1929-31, *Handbuch der systematischen Weichtierkunde*, 1 : 343; Wenz (W.), 1938-44, *Handbuch der Paläozoologie* (edit. O. H. Schindewolf), Gastropoda : 1309) the genus *Harpa* is cited as of " (Rumph) Walch, 1771 ", and it was ascertained that the probable source of this reference was an entry in Herrmannsen (A.N.), 1846-9, *Indicis Generum Malacozoorum*, 1 : 501, where the first post-Linnean reference given for *Harpa* is "Walch 1771. Natgsh. d. Verst. III, p. 113". Investigation of this reference has shown that, not only is the citation of the date and of the volume of Walch wrong (it should read "1768 . . . II(i)"), but also that the name of the shell was published by Walch only in the German vernacular form "Harfen-Schnecken".

3. Walch's names are, in fact, either in the German vernacular or, if in Latin, are polynominal. Thus on page 135 of his "zweyten Theils erster Abschnitt" (1768) we read, "Die zweyte Gattung der Ostraciten haben wir Ostreo-Pinniten genennet . . . Zu diesen schilferigen Ostrea-Pinniten sind diejenigen mit zu rechnen, welche sonst *Ostracitae gibbosi auriformes* . . . genennet werden". I do not think anybody in recent years except Thiele and Wenz has thought of attributing a generic name to Walch.

4. These old non-binominal works constitute a permanent threat to stability in nomenclature until they have been formally ruled to be invalid by the International Commission. In accordance with the principle recommended by the Fourteenth International Congress of Zoology, Copenhagen, 1953 (*Copenhagen Decisions zool. nomencl.* : 23-24, Decision 23) I recommend the International Commission on Zoological Nomenclature

- (1) to give a ruling that in the work entitled "Die Naturgeschichte der Versteinerungen zur Erläuterung der Knorr'schen Sammlung von Merkwürdigkeiten der Natur", published at Nürnberg in the period 1768-1774, Walch (J.E.I.) did not apply the principles of binominal nomenclature as required by Article 25 of the *Règles*, and therefore that no name acquired the status of availability by reason of being published in this work ;
- (2) to place the title of the foregoing work on the *Official Index of Rejected and Invalid Works in Zoological Nomenclature*.



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THE BULLETIN OF ZOOLOGICAL NOMENCLATURE

The Official Organ of
**THE INTERNATIONAL COMMISSION ON
ZOOLOGICAL NOMENCLATURE**

Edited by
FRANCIS HEMMING, C.M.G., C.B.E.

Secretary to the International Commission on Zoological Nomenclature

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INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

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Dr. K. H. L. KEY (*Commonwealth Scientific and Industrial Research Organisation, Canberra, A.C.T., Australia*) (15th October 1954)

Dr. Alden H. MILLER (*Museum of Vertebrate Zoology, University of California, Berkeley, California, U.S.A.*) (29th October 1954)

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Professor Enrico TORTONESE (*Museo di Storia Naturale "G. Doria", Genova, Italy*) (16th December 1954)

BULLETIN OF ZOOLOGICAL NOMENCLATURE

Volume 12, Double-Part 7/8 (pp. 193-224, i-xxvi)

24th August 1956

NOTICES PRESCRIBED BY THE INTERNATIONAL CONGRESS OF ZOOLOGY

The following notices are given in pursuance of decisions taken, on the recommendation of the International Commission on Zoological Nomenclature (see 1950, *Bull. zool. Nomencl.* 4 : 51-56, 57-59), by the Thirteenth International Congress of Zoology, Paris, July 1948 (see 1950, *Bull. zool. Nomencl.* 5 : 5-13, 131).

(a) Date of commencement by the International Commission on Zoological Nomenclature of voting on applications published in the "Bulletin of Zoological Nomenclature"

NOTICE is hereby given that normally the International Commission will start to vote upon applications published in the *Bulletin of Zoological Nomenclature* on the expiry of a period of six calendar months from the date of publication in the *Bulletin* of the applications in question. Any specialist who may desire to comment upon any of the applications published in the present Part (Vol. 12, Double-Part 7/8) of the *Bulletin* is accordingly invited to do so in writing to the Secretary to the Commission, as quickly as possible and in any case, in sufficient time to enable the communication in question to reach the Secretariat of the Commission before the expiry of the six-month period referred to above.

(b) Notice of the possible use by the International Commission on Zoological Nomenclature of its Plenary Powers in certain cases

NOTICE is hereby given that the possible use by the International Commission on Zoological Nomenclature of its Plenary Powers is involved in applications published in the present Part of the *Bulletin of Zoological Nomenclature* in relation to the following cases :—

- (1) *Elaphella* Bezzi, 1913, and *Lophiotherium* Gervais, 1850, validation of (Class Mammalia) (Z.N.(S.) 1077);
- (2) *verrucosa* Sars, 1901 (*Alona*), validation of (Class Crustacea, Order Cladocera) (Z.N.(S.) 840);

Notices prescribed by the International Congress of Zoology (*continued*)

- (3) *Candona* Baird, [1846], designation of a type species for, in harmony with accustomed usage and *Herpetocypris*, validation of emendation to, of *Erpetocypris* Brady & Norman, 1899 (Class Crustacea, Order Ostracoda) (Z.N.(S.) 1022);
- (4) *Conchoecia*, validation of emendation to, of *Conchaecia* Dana, 1849, and designation of a type species for, in harmony with accustomed usage (Class Crustacea, Order Ostracoda) (Z.N.(S.) 1023);
- (5) *Anchisauripus* Lull, 1904, and *Otouphepus* and *magnificus* (*Otouphepus*), both of Cushman, 1904, suppression of (Class Reptilia Theropoda [Ichnites]) (Z.N.(S.) 1081).

2. Comments received in sufficient time will be published in the *Bulletin*: other comments, provided that they are received within the prescribed period of six calendar months from the date of publication of the present Part will be laid before the International Commission on Zoological Nomenclature at the time of commencement of voting on the application concerned.

3. In accordance with the procedure agreed upon at the Session held by the International Commission on Zoological Nomenclature in Paris in 1948 (see 1950, *Bull. zool. Nomencl.* 4 : 56), corresponding Notices have been sent to the serial publications *Nature* and *Science*.

(c) Accounts of the International Trust for Zoological Nomenclature
for the year 1955

4. Attention is drawn to the publication in the present Part of the Accounts of the International Trust for Zoological Nomenclature for the year 1955 and of the Balance Sheet as at 31st December 1955, together with the Report of the International Trust thereon.

FRANCIS HEMMING,

*Secretary to the International Commission on
Zoological Nomenclature.*

28 Park Village East, Regent's Park,
LONDON, N.W.1, England.

24th August 1956.

PROPOSED USE OF THE PLENARY POWERS TO VALIDATE THE
GENERIC NAMES "ELAPHELLA" BEZZI, 1913 (CLASS INSECTA,
ORDER DIPTERA) AND "LOPHIOTHERIUM" GERVAIS, 1850
(CLASS MAMMALIA)

By

G. B. FAIRCHILD

(Gorgas Memorial Laboratory, Panama, R. de Panama)

CORNELIUS B. PHILIP

(Rocky Mountain Laboratory, Hamilton, Montana, U.S.A.)

I. M. MACKERRAS

(Queensland Institute of Medical Research, Brisbane, Australia)

and

H. OLDROYD

(British Museum (Natural History), London)

(Commission Reference : Z.N.(S). 1077)

The object of the present application is to ask the International Commission on Zoological Nomenclature to use its Plenary Powers to validate the well-known generic name *Elaphella* Bezzi, 1913 (Class Insecta, Order Diptera) by suppressing the totally overlooked name *Diplocus* Blanchard, 1845. The facts of this case are set out below.

2. The genus with which the present application is concerned was first named in 1834 when Macquart published the name *Dicrania* for it (Macquart, 1834, *Roret's Suites à Buffon*, Dipt. 1 : 195). Macquart placed two nominal species in this genus, namely *Pangonia cervus* Wiedemann, 1828 (*Aussereurop. Zweifl. Insekt.* 1 : 94) and *Pangonia furcata* Wiedmann, 1828 (*ibid.* 1 : 99). Macquart did not designate a type species for this genus.

3. The name *Dicrania* Macquart, 1834, is invalid as being a junior homonym of *Dicrania* Lepeletier & Serville, 1828 (*Ency. meth., Ins.* 10(2) : 371) (Class Insecta, Order Coleoptera). On this account the name *Dicrania* Macquart was replaced in 1901 (*Trans. amer. ent. Soc.* 27 : 135) by Hunter who gave it the name *Dicranomyia*. Unfortunately, the name *Dicranomyia* Hunter is

invalid, being a junior homonym of *Dicranomyia* Stephens, 1829 (*Nom. Brit. Ins.* : 53). This genus was renamed twice in 1913 : first by Bezzi (*Soc. ent.* 28(13) : 56), who called it *Elaphella*, second, by Enderlein (*Zool. Anz.* 42 : 253), who called it *Allodicerania*. *Elaphella* was published as *nom. nov.* for *Dicranomyia* Hunter, *Allodicerania* as a *nom. nov.* for *Dicrania* Macquart. Fortunately, there is no difficulty in establishing the relative priority of these names, for the parts of the serials in which they were published are fully dated, the part of the *Soc. ent.* containing the name *Elaphella* bearing the date 5th July 1913, that of the *Zool. Anz.* containing the name *Allodicerania* bearing the date 18th July 1913.

4. In the forty-two years which have since elapsed this genus has been continuously known by the name *Elaphella*. Authors who have used this name include : Enderlein, 1925 (*Mitt. zool. Mus. Berlin* 11(2) : 298) ; Kroker, 1930 (*Zool. Anz.* 88 : 309) ; Borgmeier, 1933 (*Rev. Ent.* 3 : 292) ; Kroker, 1934 (*Rev. Ent.* 4 : 235) ; Bezzi, 1920 (*Ann. ent. Soc. Amer.* 13 : 408) ; Bequaert & Renjifo-Salcedo, 1946 (*Psyche* 53 : 54).

5. Unfortunately, the name *Elaphella* Bezzi is itself invalid, there being a much older but hitherto totally overlooked substitute name for *Dicrania* Macquart, to which attention was drawn by Neave in 1939 (*Nomencl. zool.* 2 : 108). This is the name *Diplocus* Blanchard, 1845 (*Hist. Ins.* 2 : 470). This name was published as a *nom. nov.* for *Dicrania* in a perfectly regular manner and its availability cannot be questioned. No reference to the name *Diplocus* can, however, be found in the whole of the tabanid literature since the time of its publication. It was overlooked in the following world catalogues : Kertész, 1900, *Catalogus Tabanidarum Orbis Terrarum Universi*, Budapest, 79 pp. ; Kertész, 1908, *Cat. Dipt. Hucusque descript.*, Vol. III, 367 pp. ; Surcouf, 1921, Wytzman's *Genera Insectorum*, Fasc. 175, Diptera Tabanidae, Bruxelles, 181 pp. ; Kroker, 1934, *Catalogo do Tabanidae*, etc., (*Revista entomologica* 2 : 222-276). In addition, the name *Diplocus* was missed in several private catalogues also, for example, in the personal annotated copies of Kertész from both Austen and Ricardo (British Museum (Natural History)) now in the hands of Oldroyd and Fairchild respectively, and in a very complete generic catalogue compiled by J. Bequaert (Harvard Museum of Comparative Zoology). The name is not mentioned in the extensive generic revisions of Neotropical Tabanidae published by Adolpho Lutz from 1905 to 1937 in Brazil.

6. The species *Pangonia cervus* Wiedemann has been treated by all authors as representing the present genus, whatever the name applied to it. It was first formally made the type species in 1913 (*Zool. Anz.* 42 : 253) when Enderlein, not knowing of the existence of *Elaphella*, made it the type species of *Allodicerania*, thereby automatically making it the type species also of *Elaphella* Bezzi and of all the other substitute names for *Dicrania* Macquart.

7. The name *Elaphella cervus* (Wiedemann) has become thoroughly established through continuous usage and is familiar to all workers in this group, while the name *Diplocus cervus* (Wiedemann) has never been used for it and, if now introduced would be unfamiliar and confusing. The species concerned is a well-known insect in Surinam, Brazil, Peru and Colombia. It has been discussed by at least fourteen authors, in some cases in more than one publication. It is considered therefore that in the interest of nomenclatorial stability it is desirable that the Commission should validate the name *Elaphella* Bezzi and that, having done so, it should place that name on the *Official List of Generic Names in Zoology*. The objectively invalid names discussed in the present paper should at the same time be placed on the *Official Index of Rejected and Invalid Names*. To these should be added the name *Stichocera* Hine, 1920 (*Ohio J. Sci.* 20 : 185), the most recent of the names published as substitutes for *Dicranomyia* Hunter.

8. In considering the proposal that the generic name *Diplocus* Blanchard, 1845, should be suppressed in favour of the name *Elaphella* Bezzi, 1913, the Commission will no doubt wish to consider also the generic name *Diplocus* Pictet, 1853 (*Traité Paléont.* (ed. 2) 1 : 340), the status of which might be affected by the action recommended. The name *Diplocus* Pictet applies to a fossil mammal and on the action to be taken as regards this name the applicants have consulted Dr. A. Tindell Hopwood (*British Museum (Natural History)*) who has both furnished the information given below in regard to the name *Diplocus* Pictet and in addition has advised how the proposals in regard to the Diptera name *Diplocus* Blanchard may be harmonised with the mammal side of the present case.

9. The following is the statement kindly furnished by Dr. Hopwood :—

- (a) The type species of *Diplocus* Pictet is the nominal species *Diplocus gervaisii* Pictet, 1853 (: 340). The type specimen of this species is the type specimen also of *Lophiotherium cervulum* Gervais, 1850 (*Zool. Paléont. franc.* (ed. 1) : Explic., pl. 11, figs. 10, 10a, 11, 12). Thus, the specific names *gervaisii* Pictet and *cervulum* Gervais are objective synonyms of one another. This species was referred to again by Gervais in 1859 in the Second Edition of the *Zool. Paléont. franc.* (: 114) and on this occasion Gervais cited as a synonym *Diplocus gervaisii* Pictet, which, however, he attributed to "Aymard in Pictet". In both editions of the above work Gervais treated the specimen illustrated on figs. 10 and 10a on his plate 11 as the principal specimen of his nominal species *Lophiotherium cervulum* of 1850. That specimen is accordingly here selected as the lectotype of that species. Similarly, the generic name *Diplocus* Pictet and *Lophiotherium* Gervais (which was described jointly with its type species, *Lophiotherium cervulum*) are objective synonyms of one another. (It should be noted that Sherborn and later Neave were in error in attributing the name *Lophiotherium* Gervais to 1849 (*C. R. Acad. Sci.*, Paris 29 : 381, 573), for as there published this generic name was a *nomen nudum*.

- (b) The name *Lophiotherium* Gervais, 1850, is however, a junior homonym of *Lophiotherium* Fischer de Waldheim, 1829 (*Nouv. Mém. Soc. imp. Nat. Moscou* 1 : 284). This name was given by Fischer to a genus caelebs which Sherborn (1927, *Index Anim.*, Pars secund. : 3669) identified with *Lophiodon* Cuvier (G.), [1821-1822] (*Mém. Acad. roy. Sci.*, Paris 5 (Hist. Ac.) : 161).
- (c) Fischer's vagaries seem to have been forgotten and the name *Lophiotherium* Fischer has disappeared from the literature. On the other hand, the name *Lophiotherium* Gervais, 1850, is in universal use and it would be most undesirable that this arrangement should be disturbed on technical nomenclatorial grounds. It is accordingly requested that, when the Commission suppresses the name *Diplocus* Blanchard, 1845, in the interests of the name *Elaphella* Bezzi, 1913, in the Order Diptera, it should (a) suppress also the long-forgotten name *Lophiotherium* Fischer de Waldheim, 1829, for the purposes both of the Law of Priority and of the Law of Homonymy and (b) limit the suppression of the name *Diplocus* Blanchard to suppression for the purposes of the Law of Priority, thereby securing that the name *Diplocus* Pictet, 1853, remains invalid as a junior homonym of *Diplocus* Blanchard, 1845.

10. No family-group name problems arise in connection with either part of the present application, for the genus *Elaphella* Bezzi in Diptera is currently placed in the family TABANIDAE. As regards *Lophiotherium* Gervais, Dr. Hopwood has informed us that this genus has never been taken as the type genus of a family-group taxon. It is currently placed in the family PALEOTHERIIDAE of the Order Perissodactyla. This family consists of a rather aberrant group of mammals sharing some characters with primitive horses and others with primitive tapirs. The genus died out at the end of the Eocene, and the family in the Lower Oligocene.

11. For the reasons set forth in the present application the International Commission on Zoological Nomenclature is asked :—

(1) to use its Plenary Powers :—

- (a) to suppress the generic name *Diplocus* Blanchard, 1845 (Class Insecta, Order Diptera) for the purposes of the Law of Priority but not for those of the Law of Homonymy ;
- (b) to suppress the generic name *Lophiotherium* Fischer de Waldheim, 1829 (Class Mammalia) for the purposes both of the Law of Priority and of the Law of Homonymy ;

(2) to place the under-mentioned generic names on the *Official List of Generic Names in Zoology* :—

- (a) *Elaphella* Bezzi, 1913, as validated under the Plenary Powers under (1)(a) above (gender : feminine) (type species, under Rule (f) in Article 30 by designation by Enderlein (1913) as the

type species of the objectively identical nominal genus *Allodicerania* Enderlein, 1913 : *Pangonia cervus* Wiedemann, 1828) (Class Insecta, Order Diptera) ;

- (b) *Lophiotherium* Gervais, 1850, as validated under the Plenary Powers under (1)(b) above (gender : neuter) (type species, by monotypy : *Lophiotherium cervulum* Gervais, 1850, as defined by the lectotype selected by Hopwood in paragraph 9(a) of the present application) (Class Mammalia) ;

(3) to place the under-mentioned specific names on the *Official List of Specific Names in Zoology* :—

- (a) *cervus* Wiedemann, 1828, as published in the combination *Pangonia cervus* (specific name of type species of *Elaphella* Bezzi, 1913) ;
(b) *cervulum* Gervais, 1850, as published in the combination *Lophiotherium cervulum* and as defined by the lectotype specified in (2)(b) above (specific name of type species of *Lophiotherium* Gervais, 1850) ;

(4) to place the under-mentioned generic names on the *Official Index of Rejected and Invalid Generic Names in Zoology* :—

- (a) *Allodicerania* Enderlein, 1913 (a junior objective synonym of *Elaphella* Bezzi, 1913) ;
(b) *Dicrania* Macquart, 1834 (a junior homonym of *Dicrania* Lepeletier & Serville, 1828) ;
(c) *Dicranomyia* Hunter, 1901 (a junior homonym of *Dicranomyia* Stephens, 1829) ;
(d) *Diplocus* Blanchard, 1845, as suppressed under the Plenary Powers under (1)(a) above ;
(e) *Stichocera* Hine, 1920 (a junior objective synonym of *Elaphella* Bezzi, 1913) ;
(f) *Lophiotherium* Fischer de Waldheim, 1829, as suppressed under the Plenary Powers under (1)(b) above ;
(g) *Lophiotherium* Gervais, 1849 (a *nomen nudum*) ;
(h) *Diplocus* Pictet, 1853 (a junior homonym of *Diplocus* Blanchard, 1845, and a junior objective synonym of *Lophiotherium* Gervais, 1850) ;

(5) to place the under-mentioned specific name on the *Official Index of Rejected and Invalid Specific Names in Zoology* :—*gervaisii* Pictet, 1853, as published in the combination *Diplocus gervaisii* (a junior objective synonym of *cervulum* Gervais, 1850, as published in the combination *Lophiotherium cervulum*).

PROPOSED USE OF THE PLENARY POWERS TO VALIDATE THE
SPECIFIC NAME " VERRUCOSA " SARS, 1901, AS PUBLISHED
IN THE COMBINATION " ALONA VERRUCOSA " (CLASS
CRUSTACEA, ORDER CLADOCERA)

By D. S. JOHNSON

(University of Malaya, Singapore)

(Commission Reference : Z.N.(S.) 840)

The object of the present application is to ask the International Commission to provide a firm nomenclatorial basis for the specific name *verrucosa* Sars, 1901, as published in the combination *Alona verrucosa* (Class Crustacea, Order Cladocera). This is a common pan-tropical species, the name currently used for which is invalid as a junior homonym of an identical name previously published by Lutz. The reason why the validation of the specific name *verrucosa* Sars is particularly to be desired is that, as is shown below, if this name were to be rejected, there is no name which would clearly be applicable to this well-known species, there being three other names which might be subjectively applied to it by specialists. There would therefore be a continuing prospect of instability and confusion in the nomenclature of this species. The facts of this case are set out briefly below.

2. In 1901 (: 56, pl. IX, figs. 7, 7a) Sars described a species of Cladocera to which he applied the name *Alona verrucosa*. This species is allied to, but is accepted as distinct from, *Alona rectangula* Sars, 1862 (: 278). This latter species is now better understood than formerly, having been defined and redescribed by Jenkin in 1934. It has since been recorded by Brehm (1937) who has identified a number of other nominal species with it.

3. Unfortunately, in 1879 (: 44) Lutz established a nominal species *Alona verrucosa* which cannot be identified with certainty. It is possible that the species so named is the same as that to which later Sars gave an identical name, but it is probable that it is not. The name *Alona verrucosa* Lutz must be regarded as being a *nomen dubium*, for its interpretation is likely to differ from one author to another. These differences of opinion are likely to give rise to considerable confusion, unless the Commission intervenes, since the name *verrucosa* is likely to be applied by some authors to the common species with which the present application is concerned (i.e. to *verrucosa* Sars) though with Lutz treated as the author, while other authors may be expected to apply what they consider to be the next junior synonym to Sars' species.

4. There are two nominal species which were described prior to the publication of the name *A. verrucosa* Sars, which it is possible are the same as Sars' species. These are: (1) *Alona pulchra* Hellich, 1874 (: 215, 219) and (2) *Alona tuberculata* Hudendorf, 1876 (: 54, pl. II, fig. 6). The second of these names need not detain us, for it is invalid, being a junior homonym of *Alona tuberculatus* Kurz, 1874 (itself, a subjective junior synonym of *Alona guttata* Sars, 1862). The nominal species *Alona pulchra* Hellich is of uncertain identity. Some of the taxa referred to this species show strong resemblance to *verrucosa* Sars, but Brehm (1933a) has pointed out that Hellich's species is in reality quite distinct. Thus, the name *Alona pulchra* Hellich must be regarded as a *nomen dubium* and one moreover which, unless suppressed by the Commission, is likely to give rise to confusion through being applied to the Sars' *verrucosa* by those authors who reject Sars' name as a junior homonym of *verrucosa* Lutz.

5. Another name which might be applied to *verrucosa* Sars by authors who reject that name as a junior homonym of *verrucosa* Lutz, is *alonopsiformis* Brehm, 1933, as published in the combination *Alona alonopsiformis*. Brehm himself (1937) considers this to be identical with *Alona verrucosa* Sars.

6. A further difficulty and source of possible confusion arises from the fact that in 1905 Daday established a nominal species *Alona anodonta*, which it is possible is identical with *Alona verrucosa* Sars. However, according to Daday, his species lacks the teeth on the labrum which is one of the distinguishing features of *verrucosa* Sars. The question whether these two nominal species represent the same taxon is thus very much a matter of opinion. Brehm (1933a; 1937), for example, does not identify these nominal species with one another.

7. It will be seen, therefore, that, if the name *Alona verrucosa* Lutz were to be permitted to retain its status as an available name, the species now known as *Alona verrucosa* Sars, 1901, might, according to the the subjective taxonomic judgments by individual workers, appear in the literature under any one of no less than four following specific names: (1) *verrucosa* Lutz, 1879; (2) *anodonta* Daday, 1905; (3) *alonopsiformis* Brehm, 1933; or even (4) *pulchra* Hellich, 1874. If, on the other hand the two *nomina dubia* here in question, namely (a) *pulchra* Hellich and (b) *verrucosa* Lutz, were to be suppressed by the Commission under its Plenary Powers, all possible source of confusion would be removed. So far, the species described by Sars as *verrucosa* has been known only by that name and no confusion exists, but, as has been shown, that name at present possesses no solid legal foundation. It is to provide that name with such a foundation and to prevent the confusion which would arise if an attempt were to be made to reject it on any of the grounds described above that the present application is submitted to the Commission.

8. For the sake of completeness it would be helpful if, when dealing with the present application, the Commission were at the same time to place on the *Official List of Generic Names in Zoology* the name *Alona* Baird, 1843 (*Ann. Mag. nat. Hist.* 11 : 92) that being the name of the genus to which the species discussed in the present application are referred. The genus *Alona* Baird is commonly treated as being typified by the nominal species *Lynceus quadrangularis* Müller (O.F.), 1785 (: 199, pl. IX, figs. 1-3) and it has sometimes been suggested that this species was actually so selected by Lilljeborg (1900, *Cladocera Sueciae* : 446, footnote). Reference to Lilljeborg's work shows, however, that "rigidly construed" (as required by Rule (g) in Article 30 of the *Règles*) Lilljeborg did not select the above to be the type species of *Alona* Baird, all that he did being to cite it "als ein typischer Vertreter" of the genus. I have been unable to trace in the literature any valid type selection for the genus *Alona* Baird and Dr. J. P. Harding (*British Museum (Natural History), London*), whom I have consulted, informs me that he also is unaware of any such selection. On his suggestion and in order to bring this issue to a close I now here select the nominal species *Lynceus quadrangularis* Müller (O.F.), 1785, to be the type species of the genus *Alona* Baird.

9. In 1860 (: 221, pl. VIII, fig. 59) Leydig published the name *Lynceus quadrangularis* as the name for an entirely different species from that to which this name had been given by Müller in 1785. Fourteen years later Kurz in 1874 established the nominal genus *Leydigia* (: 57) and designated *Lynceus quadrangularis* Leydig, 1860, as type species. As already noted, that specific name is a junior primary homonym of the name *Lynceus quadrangularis* Müller, 1785, and is therefore invalid. This nominal species was re-named *Alona leydigi* by Schödler in 1863 (: 27). I am informed by the Secretary to the Commission that under a recent decision embodied in *Declaration* 21 (now in the press¹) the Commission has ruled that, where one of two or more objectively identical nominal species is designated, indicated or selected as the type species of a genus, that genus shall be cited as having as its type species the oldest established of the nominal species concerned. Since the nominal species *Lynceus quadrangularis* Leydig, 1860, and *Alona leydigi* Schödler, 1863, are objectively identical with one another (Schödler's name *leydigi* having been published as a substitute for the invalid name *quadrangularis* Leydig), it follows that under the *Declaration* referred to above it is the nominal species *Alona leydigi* Schödler, 1863, and not the nominal species *Lynceus quadrangularis* Leydig, 1860, which is to be treated as being the type species of *Leydigia* Kurz, 1874. It is recommended that the present opportunity should be taken to place the names *Leydigia* Kurz and *leydigi* Schödler on the *Official Lists* of valid generic and specific names respectively and the name *quadrangularis* Leydig on the *Official Index of Rejected and Invalid Specific*

¹ The *Declaration* here referred to was published on 19th June, 1956 (*Ops. Decls. int. Comm. zool. Nomencl.* 12 : i-viii).

Names in Zoology. In order fully to cover all aspects of the present case it would be desirable also that the generic name *Lynceus* Müller (O.F.), 1776 (*Zool. dan. Prodr.* : xxvii, 199) (Class Crustacea, Order Conchostraca) should be placed on the *Official List of Generic Names in Zoology* with *Lynceus brachyurus* Müller (O.F.), 1776 (*ibid.* : 199) as type species by selection by Latreille, 1810 (*Consid. gén. Ordre nat. Anim. Classes Arachn. Crust. Ins.* : 421, 91). At the same time the specific name *brachyurus* Müller, 1776, as published in the above combination, should be placed on the *Official List of Specific Names in Zoology*. Finally, the name *Lynceus* Gray (J.E.), 1821 (*London med. Repository* 15 : 302) (Class Mammalia), should, as a junior homonym of *Lynceus* Müller (O.F.), 1776, be placed on the *Official Index of Rejected and Invalid Generic Names in Zoology*.

10. Neither the generic name *Alona* Baird nor the name *Leydigia* Kurz has been taken as the base for a family-group name. No family-group-name problem therefore arises, so far as the names of genera of the Cladocera dealt with in the present application are concerned. The generic name *Lynceus* Müller, 1776 (Order Conchostraca) was, however, taken as the base for the name of a family-group taxon by Sayce (O.A.), in 1902 (*Proc. Roy. Soc. Victoria* (n.s.) 15 : 257). The family-group name LYNCEIDAE Sayce, 1902, should now be placed on the *Official List*.

11. For the reasons explained above, I ask the International Commission on Zoological Nomenclature :—

(1) to use its Plenary Powers to suppress :—

- (a) the under-mentioned specific name for the purposes both of the Law of Priority and of the Law of Homonymy : *verrucosa* Lutz, 1879, as published in the combination *Alona verrucosa* ;
- (b) the under-mentioned specific name for the purposes of the Law of Priority but not for those of the Law of Homonymy : *pulchra* Hellich, 1874, as published in the combination *Alona pulchra* ;

(2) to place the under-mentioned generic names on the *Official List of Generic Names in Zoology* :—

- (a) *Alona* Baird, 1843 (gender : feminine) (type species, by selection in paragraph 8 of the present application : *Lynceus quadrangularis* Müller (O.F.), 1785) (Class Crustacea, Order Cladocera) ;
- (b) *Leydigia* Kurz, 1874 (gender : feminine) (type species by original designation of *Lynceus quadrangularis* Leydig, 1860, and through Declaration 21 : *Alona leydigi* Schödler, 1863 (a substitute nominal species for *Lynceus quadrangularis* Leydig, 1860, the name of which is invalid as a junior primary homonym of *Lynceus quadrangularis* Müller (O.F.), 1785)) (Class Crustacea, Order Cladocera) ;

- (c) *Lynceus* Müller (O.F.), 1776 (gender : masculine) (type species, by selection by Latreille (1810) : *Lynceus brachyurus* Müller (O.F.), 1776) (Class Crustacea, Order Conchostraca) ;
- (3) to place the under-mentioned specific names on the *Official List of Specific Names in Zoology* :—
- (a) *verrucosa* Sars, 1901, as published in the combination *Alona verrucosa*, as validated under the Plenary Powers under (1)(a) above ;
- (b) *rectangula* Sars, 1862, as published in the combination *Alona rectangula* ;
- (c) *quadrangularis* Müller (O.F.), 1785, as published in the combination *Lynceus quadrangularis* (specific name of type species of *Alona* Baird, 1843) ;
- (d) *leydigi* Schödler, 1863, as published in the combination *Alona leydigi* (specific name of type species of *Leydigia* Kurz, 1874) ;
- (e) *brachyurus* Müller (O.F.), 1776, as published in the combination *Lynceus brachyurus* (specific name of type species of *Lynceus* Müller (O.F.), 1776) ;
- (4) to place the under-mentioned generic name on the *Official Index of Rejected and Invalid Generic Names in Zoology* : *Lynceus* Gray (J.E.), 1821 (a junior homonym of *Lynceus* Müller (O.F.), 1776) ;
- (5) to place the under-mentioned specific names on the *Official Index of Rejected and Invalid Specific Names in Zoology* :—
- (a) the two specific names specified in (1) above, as there respectively suppressed under the Plenary Powers ;
- (b) *tuberculata* Hudendorff, 1876, as published in the combination *Alona tuberculata* (a junior primary homonym of *tuberculata* Kurz, 1874, as published in the combination *Alona tuberculata*) ;
- (c) *quadrangularis* Leydig, 1860, as published in the combination *Lynceus quadrangularis* (a junior primary homonym of *quadrangularis* Müller (O.F.), 1785, as published in the combination *Lynceus quadrangularis*)];
- (6) to place the under-mentioned family-group name on the *Official List of Family-Group Names in Zoology* : LYNCEIDAE Sayce (O.A.), 1902 (type genus : *Lynceus* Müller (O.F.), 1776).

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**PROPOSED USE OF THE PLENARY POWERS TO DESIGNATE
FOR THE GENUS "CANDONA" BAIRD, [1846], A TYPE SPECIES
IN HARMONY WITH ACCUSTOMED USAGE AND VALIDATION OF
EMENDATION TO "HERPETOCYPRIS" OF THE GENERIC NAME
"ERPETOCYPRIS" BRADY & NORMAN, 1899 (CLASS CRUSTACEA,
ORDER OSTRACODA)**

By **P. C. SYLVESTER-BRADLEY**

(*University of Sheffield, England, and University of Kansas, U.S.A.*)

(**Commission Reference : Z.N.(S.) 1022**)

Howe (1955 : 26) has recently discovered and reported an early type selection of the genus *Candona* Baird, [1846], which has hitherto been universally overlooked and which, if now brought into force, as it must be by the strict application of the *Règles* would (a) alter the meaning of the genus *Candona*, which for a hundred years has stood for one of the most abundant and cosmopolitan of all fresh-water Ostracod genera ; and (b) lead to the suppression of another very well-known fresh-water genus, *Erpetocypris* Brady and Norman, 1899. The purpose of the present application is to suppress this newly-discovered type selection so that these two well-known generic names can be retained with their long accustomed meaning.

2. The generic name *Candona* was proposed by Baird (1846a : 152, 153) for four species and one *nomen nudum*. The four species in question were *Cypris candida* Müller (O.F.), 1776 (: 199) ; *C. reptans* Baird, [1836] (: 99) ; *C. hispida* Baird, 1836 ; and *C. detecta* Müller (O.F.), 1776.

3. One of these species (*Cypris reptans* Baird, [1836], was selected by Baird (1846b : 414) as type species. Baird's selection has been entirely overlooked, however, until its recent discovery by Howe (1955 : 26) who states : " Baird's designation of a genotype was probably the first such designation in the field of ostracods, and under the Rules should hold ".

4. Nevertheless, the genus *Candona* has never been interpreted in the light of Baird's type-selection, but by that of Brady and Norman (1889 : 98) who selected *Cypris candida* Müller type species. With this interpretation the genus has become perhaps the best known and most abundant and widely distributed of all fresh-water Ostracods. G. W. Müller (1912) in his comprehensive work on the Ostracoda of the World describes forty-two species of *Candona*, and lists another fourteen species under the name of the genus, while Klie (1938) describes forty-one species and named varieties from Germany alone.

5. *Candona* was made type genus of the nominal family-group taxon CANDONINAE almost simultaneously by Kaufmann (1900 : 107, 108), Müller (1900 : 12, 13) and Daday (1900 : 205).

6. At the same time as they selected *Cypris candida* as type species of *Candona*, Brady and Norman (1889 : 84) erected a new genus, *Erpetocypris*, with *Cypris reptans* Baird as type species. Sars (1890 : 34) amended the spelling of the name to *Herpetocypris* and under one spelling or the other the genus has become very well known. The type species itself has been recorded from Europe, North Africa, North America, South America, Persia and Japan, and is also a known fossil.

7. *Herpetocypris* was made type genus of the nominal family-group taxon HERPETOCYPRIDINAE by Kaufmann (1900 : 105).

8. If Howe's discovery of Baird's selection of *Cypris reptans* as type species of *Candona* were to be brought into action, the name would have to be transferred from the large group of species which for the last hundred years it has signified, and take the place of *Herpetocypris*, which would disappear as an objective synonym. At the same time another name would need to be found for the genus at present known as *Candona*. Howe (1955 : 71) suggests *Typhlocypris* Vějdovský (1882 : 64) (type species *Cypris eremita* Vějdovský, 1880 : L), a name which has for the last fifty years been abandoned as a junior subjective synonym of *Candona*. (In this connection it must be noted that Neave (S.A.), 1940 (*Nomencl. zool.* 4 : 601) was in error in citing the name *Typhlocypris* Vějdovský as having been first published in 1880 in the paper "Opuvodu fauny studnickne, Prague, xlix". Reference to this paper which was published in the volume for 1880 of the *Jahresb. K. böhm. Ges. Wiss.* (: XLIX-LVI) shows that the name *Typhlocypris* did not appear in it.) The family-group names would be affected in the same manner. These nomenclatorial changes would cause disastrous confusion.

9. It is therefore recommended that the International Commission use its Plenary Powers to direct that all type selections made previous to that of Brady and Norman (1889) in respect of the genus *Candona* should be regarded as invalid, thus preserving for the name in question as well as for the name *Herpetocypris* their accustomed meaning.

10. At the same time it is desirable that the Commission should stabilize the spelling of the name *Herpetocypris*. Within the meaning of the definitions introduced at Copenhagen, *Erpetocypris* is a *Valid Original Spelling* and *Herpetocypris* is an *Invalid Emendation*. The emendation was made first by Sars (1890 : 34) without comment. Clause (1893 : 198, footnote) makes the same emendation, and Brady and Norman themselves, in the second part of their work, say "In Part I, for *Erpetocypris* read partim *Herpetocypris*" (Brady and Norman, 1896 : 772, footnote). Since that time both spellings have been in use, but *Herpetocypris* has been the more popular. All the main Ostracod handbooks use *Herpetocypris* (e.g. Müller, 1912 ; Sars, 1925-1928 ; Klie, 1938) and in the author's card index there are five times the number of

papers which use *Herpetocypris* to those which use the original spelling. It therefore seems advisable to ask the Commission, in the interests of stability, to use their Plenary Powers to validate the emendation to *Herpetocypris*. It will be seen from the Appendix that a majority of the taxonomists who support this application so far as it refers to the type species of *Candona* also support the recommendation to validate the spelling *Herpetocypris*. The feeling expressed is not strong, however, and there is reason in the arguments put forward by Dr. Oertli (Appendix, paragraph (2)(c)) for the retention of *Erpetocypris*. There are two important points on which all who have been consulted seem to agree

- (1) that a definite official pronouncement should be made authorizing one spelling or the other and thus ending any uncertainty as to which name should be used in the future ; preference as to which of the two spellings should be authorized is of secondary importance ;
- (2) that the family name based on the taxon should be spelled in the same way as the genus ; if *Erpetocypris* were to be chosen as the authorized spelling of the generic name, this would necessitate use of the Plenary Powers for the suppression of the family-group name HERPETOCYPRIDINAE Kaufmann, 1900, in favour of a new name, ERPETOCYPRIDINAE, since *Herpetocypris* would be an objective synonym of *Erpetocypris*, and as such by the provisions affecting family-group names made at Copenhagen, would be an available name for the type-genus of a family-group name ; HERPETOCYPRIDINAE would thus be a senior objective synonym of ERPETOCYPRIDINAE.

11. Accordingly the International Commission is requested :—

- (1) to use its Plenary Powers (a) to set aside all type-selections for the genus *Candona* Baird, 1845, made prior to the ruling now asked for, and having done so, to designate *Cypris candida* Müller (O.F.), 1776, to be the type species of the foregoing genus and (b) to validate the currently accepted emendation *Herpetocypris* for the generic name *Erpetocypris* Brady and Norman, 1889 ;
- (2) to place the following names on the *Official List of Generic Names in Zoology* :—
 - (a) *Candona* Baird, [1846], (gender : feminine) (type species, by designation under the Plenary Powers under (1)(b) above : *Cypris candida* Müller (O.F.), 1776) ;
 - (b) *Herpetocypris* (emend. of *Erpetocypris*) Brady and Norman, 1889 (gender : feminine) (type species, by original designation : *Cypris reptans* Baird, [1836]) ;
 - (c) *Typhlocypris* Vějdovský, 1882 (gender : feminine) (type species, by monotypy : *Cypris eremita* Vějdovský, 1880) (for use by any specialist who may regard *Typhlocypris* as representing a taxon distinct from *Candona* Baird, 1845) ;

(3) to place the following specific names on the *Official List of Specific Names in Zoology* :—

- (a) *candida* Müller (O.F.), 1776, as published in the combination *Cypris candida* (specific name of type species of *Candona* Baird, [1846]) ;
- (b) *reptans* Baird, [1836], as published in the combination *Cypris reptans* (specific name of type species of *Herpetocypris* Brady and Norman, 1889) ;
- (c) *eremita* Vějdovský, 1880, as published in the combination *Cypris eremita* (specific name of type species of *Typhlocypris* Vějdovský, 1882) ;

(4) to place the following names on the *Official List of Family-Group Names in Zoology* :—

- (a) CANDONINAE Kaufmann, 1900 (type genus : *Candona* Baird, 1845) ;
- (b) HERPETOCYPRIDINAE Kaufmann, 1900 (type genus : *Herpetocypris* Brady and Norman, 1889) ;

(5) to place the name *Erpetocypris* Brady and Norman, 1889 (an original spelling suppressed under the Plenary Powers under (1)(c) above) on the *Official Index of Rejected and Invalid Generic Names in Zoology* for the purposes of the Law of Priority, but not for those of the Law of Homonymy.

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APPENDIX

Support for and Opposition to the foregoing Application

(1) The following taxonomists support the foregoing application in its entirety:—

(a) Dr. Olaf Elofson, Institute of Zoology, Uppsala, Sweden :

I support the proposal in its entirety (8th November 1955) ;

(b) Dr. J. P. Harding, British Museum (Natural History) :

I am prepared to support this application in its entirety. I regard it as essential that the proposal with regard to *Candona* be accepted. With regard to the choice between the spellings *Erpetocypris* and *Herpetocypris* I am relatively indifferent, but prefer the latter and therefore support the present application (13th October 1955) ;

- (c) Dr. E. J. Iles, University of Manchester, England :

I unreservedly support the application that the name *Candona* should be validated for the genus with *Cypris candida* Müller as type species. The changes which would result in the taxonomic meaning of the name as a result of the strict application of the rules of priority, would lead to endless confusion. There seems to be less ground for validation of the spelling *Herpetocypris* rather than *Erpetocypris* which has priority. Though both derivations of the roots would seem to be acceptable, *Herpetocypris* would seem to more nearly follow usual practice. For that reason I support the application that the emended spelling *Herpetocypris* should be validated (21st October 1955);

- (d) Dr. Robert V. Kesling, Museum of Paleontology, University of Michigan, U.S.A. :

I am particularly anxious that the proposal be approved, inasmuch as I have a paper in process on the morphology and dimorphism in a species that belongs in the genus *Candona*, as commonly accepted. If there is sufficient evidence to determine the original author of CANDONINAE, this information might well be included in the proposal. I support this proposal enthusiastically (24th September 1955);

- (e) Dr. A. J. Key, Geological Institut, Rijksuniversiteit van Utrecht, Netherlands :

I declare that I quite agree to all details within the application of Prof. Dr. P. C. Sylvester-Bradley, to designate *Cypris candida* O. F. Müller as the type species of the ostracode genus *Candona* Baird, 1845. As argued by Prof. Sylvester-Bradley, recognition of Baird's type selection would cause an endless confusion, because it is concerned with two of the best known freshwater ostracode genera, i.e. *Candona* and *Herpetocypris*. As to the spelling of the generic name *Erpetocypris* Brady and Norman, 1889, I prefer the currently accepted spelling *Herpetocypris* (26th September 1955);

- (f) Dom Remacle Rome, Louvain, Belgium (23rd September 1955);

- (g) Prof. Dr. Giuliano Ruggieri, University of Bologna, Italy (26th October 1955);

- (h) Dr. Robert H. Shaver, University of Mississippi, U.S.A. :

I should like to go on record entirely in support of your proposals as a result of conditions as stated (22nd September 1955).

(2) The following taxonomists support the foregoing application in all respects except for the suppression of the spelling *Erpetocypris* in favour of *Herpetocypris*, which they oppose:—

(a) Dr. N. Grekoff, Institut Français du Pétrole, Rueil-Malmaison, France :

D'accord pour le génotype de *Candona*, pour lequel vous proposez d'indiquer l'espèce *candida*, admis par l'usage. Je crois qu'il est préférable de garder *Erpetocypris* au lieu d'*Herpetocypris*, mais ici, je m'inclinerai devant l'avis de la majorité des spécialistes de la question. La difficulté serait de trouver un nom de sous-famille (? *Herpetocypridinae* ou *Erpetocypridinae*). Cependant, avec Z. Bronstein (1947, p. 143) je place le genre *Erpetocypris* dans la sous-famille des *Cypridinae* G. W. Müller, 1894, *Candona* étant le type de la sous-famille *Candoninae* Kaufmann 1900 (14th October 1955) ;

(b) Dr. Ivar Hessland, Geologiska Institutet, Stockholms Högska, Sweden :

As a matter of principle I am for the original spelling of *Herpetocypris*, i.e. *Erpetocypris*. I am very much against suppression of designations of type species, but may agree to your proposal in this particular case, viz. with regard to *Candona* (6th October 1955) ;

(c) Dr. H. Oertli, Bern Switzerland :

I fully support the proposal clearing the position and validity of *Candona*. On the other hand, I should prefer the spelling *Erpetocypris*. This, the correct spelling, has not been forgotten for dozens of years, but has been applied by about all who were conscious of the differences between *Herpetocypris* and *Erpetocypris*. I think that most who wrote *Herpetocypris* have taken this name over from other authors, i.e., without going to the "source". In the last few years more and more *Erpetocypris* has been used. I should prefer therefore not to stop this development in applying the right name, but to declare it officially as the preferable one (24th September 1955) ;

(3) Dr. Henry V. Howe, Louisiana State University, U.S.A., while not wishing to make formal opposition to the application, feels that "Baird's designation should stand as a clear, definite landmark in the history of ostracod research, as Baird was the first man in the field to realize the importance of precise definition (2nd October 1955)." Dr. F. M. Swain, University of Minnesota, U.S.A., agrees with Dr. Howe.

PROPOSED USE OF THE PLENARY POWERS FOR VALIDATING
THE CURRENTLY ACCEPTED SPELLING "CONCHOECIA" FOR
THE GENERIC NAME "CONCHAECIA" DANA, 1849 (CLASS
CRUSTACEA, ORDER OSTRACODA) AND FOR THE
DESIGNATION OF A TYPE SPECIES IN HARMONY WITH
ACCUSTOMED USAGE

By P. C. SYLVESTER-BRADLEY

(University of Sheffield, England, and University of Kansas, U.S.A.)

with an Appendix by E. J. ILES

(University of Manchester, England)

(Commission Reference : Z.N.(S.) 1023)

The object of the present application is, first, to secure the validation of the spelling *Conchoecia* which for over a hundred years has been in current use for the Ostracod introduced under the name *Conchaecia* by Dana in 1849 (*Proc. amer. Acad. Arts Sci.* 2 : 9-61)*—the most abundant and probably best-known planktonic marine Ostracod genus in existence; and, secondly, to designate as type species of the genus a species which will ensure the name will continue in use in the accustomed sense.

2. Dana introduced the name *Conchaecia* in 1849 for four species of Ostracod (*op. cit.* : 51-53). In 1853 (*U.S. explor. Exped.* 1838-1842. 14 : 1277-1618) he changed the spelling to *Conchoecia*. This change must be regarded in the terms introduced at Copenhagen, 1953 (*Copenhagen Decisions zool. Nomencl.* : 44), as an Invalid Emendation. Notwithstanding this, it has been universally adopted with the revised spelling, and no use of the former spelling (apart from bibliographic references) is known to the author—this despite the fact that the genus represents an extremely well-known group of abundant, cosmopolitan, planktonic Ostracods. (Müller, 1912 (*Das Tierreich*, Leif. 31), recognises eighty species.)

* The date for this name is given by Neave in his *Nomenclator* as "(? 1849) 1852)". The correct date is "1849". Dana's paper appears to have been published on November 8, 1849. Volume 2 appeared between May 1848 and May 1852. An abstract of the article in question appeared in the *American Journal of Science* for 1849.

3. The four species introduced by Dana in 1849 under the generic name were all new and were named respectively : *C. agilis*, *C. rostrata*, *C. brevisrostris*, and *C. inflata* (: 52).

4. No subsequent selection of a type species has yet been made. The two latter species listed were later removed by Dana to another genus, *Halocypris* Dana, [1853] (*U.S. explor. Exped.* 13/14(2) : 1301) (see paragraph 7 below). Dr. E. J. Iles, in Appendix A to the present application shows that neither of the two former nominal species would make a happy choice as type species, as it is not possible, from Dana's description, to make out which of the characters now considered diagnostic of the genus is possessed by either of them, and type specimens have not been preserved. No author other than Dana himself appears to have since recognised either species. Dr. Iles therefore recommends that, in order to place the genus *Conchoecia* on a firm basis, the Commission should use its Plenary Powers to designate as type species a species whose characters are well-known, and which agree with those currently recognised as those of the genus in its restricted sense. The species which, on these grounds, he recommends should be designated as type species is *Conchoecia magna* Claus (1874, *Schriften Zool. Inhalts*, Wien, 1, 6 ; pl. 1, fig. 6'c ; pl. 2, fig. 16, 18), and accordingly this recommendation is included in the present application.

5. The genus is the type genus of the family introduced in the form CONCHOECIDAE by Sars, [1866] (*Forh. VidenskSelsk. Krist.* 1865 : 1-130). Correctly the family-name based on the spelling *Conchoecia* should be CONCHOECIIDAE.

6. Currently many taxonomists believe the genera *Conchoecia* and *Halocypris* Dana, 1849, to be members of the same subfamily. The genus *Halocypris* is the type genus of the family introduced by Dana ([1853] : 1281) under the name HALOCYPRIDAE, but correctly spelled HALOCYPRIDIDAE. This family name is therefore a senior subjective synonym of the name CONCHOECIIDAE.

7. The genus *Halocypris* was introduced by Dana (1853 : 52) for the two species *Conchaecia inflata* Dana, 1849, and *C. brevisrostris* Dana, 1849. G. W. Müller (1912 : 58) regarded these two names as synonyms using the name *Halocypris inflata* for the resulting taxon. No type species has as yet, however, been definitely selected, and I therefore formally now select *Conchaecia inflata* Dana, 1849, to be the type species of the genus *Halocypris* Dana, 1853.

8. It would be pedantic in the extreme and contrary to the interests of stability and universality to insist in the case of *Conchoecia* on the strict application of the provisions made at Copenhagen, which would result in a change in the spelling of a name which has been in universal use for 102 years.

9. The International Commission on Zoological Nomenclature is accordingly asked :—

(1) to use its Plenary Powers :—

- (a) to validate the currently accepted emendation to *Conchoecia* of the generic name *Conchaecia* Dana (J.D.), 1849 ;
- (b) to designate as the type species of the genus *Conchoecia* Dana, 1849, the species *Conchoecia magna* Claus, 1874 ;

(2) to place the following names on the *Official List of Generic Names in Zoology* :—

- (a) *Conchoecia* (emendation under the Plenary Powers under (1)(a) above of *Conchaecia*) Dana (J.D.), 1849 (gender : feminine) (type species, by designation under the Plenary Powers under (1)(b) above : *Conchoecia magna* Claus, 1874) ;
- (b) *Halocypris* Dana (J.D.), 1853 (gender : feminine) (type species, by selection in paragraph 7 of the present application : *Conchaecia inflata* Dana (J.D.), 1849) ;

(3) to place the generic name *Conchaecia* Dana (J.D.), 1849, an Original Spelling suppressed under the Plenary Powers in (1)(a) above to the extent there specified, on the *Official Index of Rejected and Invalid Generic Names in Zoology* ;

(4) to place the following names on the *Official List of Specific Names in Zoology* :—

- (a) *magna* Claus, 1874, as published in the combination *Conchoecia magna* (specific name of type species of *Conchoecia* Dana (J.D.), 1849) ;
- (b) *inflata* Dana (J.D.), 1849, as published in the combination *Conchaecia inflata* (specific name of type species of *Halocypris* Dana, 1853) ;

(5) to place the following names on the *Official List of Family-Group Names in Zoology* :—

- (a) HALOCYPRIDIDAE (correction of HALOCYPRIDAE) Dana (J.D.), 1853 (type genus : *Halocypris* Dana (J.D.), 1853) ;
- (b) CONCHOECHIDAE (correction of CONCHOECIDAE) Sars, 1866 (type genus : *Conchoecia* Dana (J.D.), 1849) (for use by any specialist who may regard this name as representing a taxon distinct from HALOCYPRIDIDAE) ;

(6) to place the following names on the *Official Index of Rejected and Invalid Family-Group Names in Zoology* :—

- (a) HALOCYPRIDAE Dana (J.D.), 1853 (an Invalid Original Spelling for HALOCYPRIDIDAE) ;
- (b) CONCHOECIDAE Sars, 1866 (an Invalid Original Spelling for CONCHOECIIDAE).

APPENDIX A

THE SELECTION OF A TYPE SPECIES FOR THE GENUS “CONCHOECIA” DANA, 1849

By E. J. ILES

(University of Manchester)

So far no type species has been selected for the genus *Conchoecia* Dana, 1849.

2. Dana included four species in the genus. Of these his *C. brevirostris* and *C. inflata* have since been removed to the genus *Halocypris* and are thus not available. The description of his *C. agilis* and *C. rostrata* (Dana 1849 and 1852) are sufficient for the characterisation of the genus in the classic sense, but lack of information regarding diagnostic features makes specific recognition impossible.

3. Several workers have subdivided the genus *Conchoecia* in its original sense. Claus (1890) followed by Granata and Caporiacco (1849) subdivided it into several genera. Müller (1906) followed by Skogsberg (1920) included in it several species-groups. Since separation of some species into other genera will probably become accepted practice, it is clearly necessary that the type species of the genus *Conchoecia* shall be recognisable. Neither of Dana's species would be suitable.

4. Claus (1890) and Granata and Caporiacco (1949) applied the term *Conchoecia* in a restricted sense without selecting a type species. It is clearly desirable that a choice of type species of the genus should not invalidate application of the name in the sense of either of these publications. On these grounds there would appear to be four species available for the selection of the type species. These are : *C. magna* Claus, 1874, *C. spinirostris* Claus, 1874, *C. subarcuata* Claus, 1890, and *C. hyalophyllum* Claus, 1890.

5. Müller (1906) followed by Skogsberg (1920) included these four species in a species-group termed the *magna* group, implying that *C. magna* was the typical species of the group. Although the rules do not cover the use of a species-group, this group would be involved from a taxonomic viewpoint as a synonym of the term *Conchoecia* when used in a restricted sense. It would be desirable that *C. magna* should be selected as type species of the genus.

6. Unfortunately, as has been pointed out by Skogsberg (1946) there may have been some confusion in the application of the name *C. magna*. He considered that when Claus defined the restricted group *Conchoecia* in 1890 he had erroneously referred his new material to *C. magna* Claus (1874) and Müller had made the same error in defining his *magna* group in 1906. Skogsberg is of the opinion that in both cases the material was of *C. tetragona* Sars (1887). Both Müller and Claus, however, considered *C. tetragona* Sars (1887) to be a synonym of *C. magna* Claus (1874), so that even if the species are distinct the inclusion of *C. magna* in *Conchoecia* sensu Claus (1890) and in the *magna* species group of Müller (1906) is inferred.

7. If, however, *C. tetragona* does prove to be a synonym of *C. magna*, the latter is the valid name by priority. Furthermore an examination of the literature shows that there is little likelihood of *C. magna* being a synonym of any earlier published name. Dana's species, as pointed out above, are unlikely to be recognised. Sars (1866) described species which are well known and clearly differentiated. Lubbock (1856 and 1860) described species which, though not all well known, are quite distinct.

8. It is thus proposed that the Plenary Powers of the International Commission of Zoological Nomenclature should be applied to designate *Conchoecia magna* Claus, 1874 (: 6, pl. 1 and 2) to be the type species of the genus *Conchoecia* Dana, 1849.

ANNEXE TO APPENDIX A

References :

- Claus, C., 1874 "Die Familie der Halocypriden" *Schriften zool. Inhalts.*
H. I pp. 1-16
- , 1890 "Die Gattungen und Arten der mediterranen und antlantischen Halocypriden nebst Bemerkungen die Organisation derselben" *Arbeit. Zool. Inst. Wien.*, 2 : 1-34

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- Müller, G. W., 1906 "Ostracoda" *Wiss. ergeb. deutsch. Tiefsee-Exped.* **8**(Lief 2) : 29-154, pls. 5-35
- Sars, G. O., 1866 "Oversigt af Norges marine Ostracoder" *Norsk. Vid.-Akad. Forh.* Christiania **7** : 1-130
- , 1887 "Nye Bidrag til Kundskaben om Middlehavets Invertebratfauna. 4. Ostracoda mediterranea" *Archiv f. Math.-Nat.*, Christiania **12** : 173-324, pls. 1-20
- Skogsberg, T., 1920 "Studies on Marine Ostracods. Part I" *Zool. Bidr. Uppsala*. Suppl. **1** : 1-784
- , 1946 *Rep. Scient. Res.* "Michael Sars" *North Atlantic deep sea Exped.* 1910 5.1 : 1-26

APPENDIX B

SUPPORT FOR AND OPPOSITION TO THE FOREGOING APPLICATION

The following taxonomists have written to the author in support of the foregoing Application. At the time their opinions were solicited, however, that part of the Application which related to the type-species of *Conchoecia* and *Halocypris* had not been drafted. Consequently only Dr. E. J. Iles and Professor H. Graham Cannon have considered these questions. They both give their unqualified support.

(a) Prof. H. Graham Cannon, University of Manchester, England :
(15 December 1955) ;

(b) Dr. Olaf Elofson, Institute of Zoology, Uppsala, Sweden :

"I support the application in its entirety" (8 November 1955) ;

- (c) Dr. N. Grekoff, Institut Français du Pétrole, Rueil-Malmaison, France :
"D'accord pour *Conchoecia* au lieu de *Conchaecia* et pour les *Conchoeciidae*" (14 October 1955) ;

- (d) Dr. J. P. Harding, British Museum (Natural History) :
"I support this application for the validation of the currently accepted spelling '*Conchoecia*'" (13 October 1955) ;

- (e) Dr. E. J. Iles, University of Manchester, England :
"I support the proposal that the International Commission should use its Plenary Powers to validate the spelling *Conchoecia* for the genus described by Dana (1849) with the spelling *Conchaecia*. The spelling *Conchoecia* would seem to be the more correct derivation from the roots, a fact that must have been realised by Dana when at the first opportunity he changed his original spelling. The case would seem to fall under the terms of Article 19, and since no other spelling than *Conchoecia* seems since to have been used (other than in bibliographic references) no confusion would be introduced" (21 October 1955) ;

- (f) Dr. Robert V. Kesling, Museum of Paleontology, University of Michigan, U.S.A. :
"I support this proposal without reservation" (24 September 1955) ;

- (g) Dr. A. J. Key, Geologisch Instituut, Utrecht, Netherlands :
"I herewith declare that I fully agree to the application of Prof. Dr. P. C. Sylvester-Bradley to validate the generic name *Conchoecia*, instead of the original spelling *Conchaecia*. I am satisfied that it is preferable to follow the accustomed usage of more than a century, than to strictly apply the Rules of Zoological Nomenclature" (26 September 1955) ;

- (h) Dr. H. Oertli, Bern, Switzerland :
"I fully agree with the proposal to declare *Conchoecia* instead of *Conchaecia* valid and to place *Conchoecia* and especially CONCHOECHIDAE, on the *Official List of Generic, and Family-Group Names* respectively (24 September 1955) ;

- (i) Dom Remacle Rome, Louvain, Belgium : (23 September 1955) ;

- (j) Dr. Prof. Giuliano Ruggieri, University of Bologna, Italy : (26 October 1955) ;

(k) Dr. Robert H. Shaver, Department of Geology, University of Mississippi, U.S.A. :

“ I should like to go on record entirely in support of your proposals as a result of conditions as stated ” (22 September 1955) ;

One taxonomist has written in opposition to the Application :

Dr. Ivar Hessland, Geologiska Institutet, Stockholm, Sweden :

“ As a matter of principle I am for the original spelling of *Conchoecia*, i.e. *Conchaecia*. I am for the correction of the family name to CONCHAEICIDAE ” (6 October 1955).

**SUPPORT FOR THE PROPOSAL MADE BY A. E. ELLIS WITH
REGARD TO THE GENERIC NAME “ UNIO ” PHILIPSSON, 1788
(CLASS PELECYPODA)**

By HORACE B. BAKER

(*University of Pennsylvania, Philadelphia*)

Commission Reference : Z.N.(S.) 451

(For the proposal in this case see *Bull. zool. Nomencl.* 11(11) : 337—343)

(Letter dated 25th July 1956)

The proposal by Ellis to validate *Unio* and *Lymnaea* would be excellent. LYMNIDAE Rafinesque would be simpler, but LYMNAEIDAE better known. *Margaritana* has been used more than *Margaritifera*, but either would be acceptable.

PROPOSED USE OF THE PLENARY POWERS (i) TO PROTECT
THE GENERIC NAME "ANCHISAURIPUS" LULL, 1904, BY
SUPPRESSING THE GENERIC NAME "OTOUTHEPUS"
CUSHMAN, 1904, AND (ii) TO SUPPRESS THE SPECIFIC NAME
"MAGNIFICUS" CUSHMAN, 1904, PUBLISHED IN COMBINATION
WITH THE LATTER GENERIC NAME (CLASS REPTILIA :
THEROPODA [ICHNITES])

By DONALD BAIRD

(Museum of Comparative Zoology at Harvard College, Cambridge, Massachusetts,
U.S.A.)

(Commission Reference : Z.N.(S.) 1081)

The object of the present application is to ask the International Commission on Zoological Nomenclature to use its Plenary Powers to suppress a *nomen dubium*, which, so long as it remains an available name, represents a potential threat to the stability of the nomenclature of an important group of dinosaurs. The names concerned are *Otouphepus* Cushman (J.A.), March 1904 (*Amer. Geol.* 33 : 154) and *magnificus* Cushman, 1904 (*ibid.* 33 : 155), published in combination with the foregoing generic name. These names were proposed by the noted specialist in Foraminifera, J. A. Cushman, for a supposed new genus and species of Upper Triassic dinosaur and were based upon a footprint from Gill, Massachusetts. The type specimen of Cushman's nominal species is an obscure imprint isolated from its trackway (Boston Soc. Nat. No. 12857).

2. Re-analysis by new methods indicates that Cushman's type specimen is not a true footprint but the distorted impression of a footprint transmitted to a sub-surface stratum. The most characteristic features of the supposed genus *Otouphepus* are thus considered artificial rather than morphological. A darkened web outline cited by Cushman as distinctive proves to have been painted on, probably by the original collector. Its obscurity makes this specimen impossible to characterize adequately by modern standards, though the observable structure appears to be that found in the genus *Anchisauripus* Lull, April 1904 (*Mem. Boston Soc. nat. Hist.* 5 : 486).

3. The only other specimen referred specifically to *O. magnificus*, Yale Peabody Mus. No. 3386 (Lull, 1953, *Connecticut geol. nat. Hist. Survey Bull.* 81 : 177) is identifiable as a distorted imprint of *Anchisauripus tuberosus* (Hitchcock, 1836) and appears to be specifically distinct from the type specimen of *Otouphepus magnificus* Cushman.

4. Two nominal species subsequently referred to the genus *Otouphepus*, each known only from a single isolated imprint, resemble the type specimen of *Otouphepus magnificus* in obscurity of preservation but are quite different in

morphology. The first reviser (Baird, 1956, *Bull. Mus. comp. Zool.*, in press) assigns *Otouphepus minor* Lull, 1915 (*Connecticut geol. nat. Hist. Surv. Bull.* 24 : 190) to the genus *Grallator* Hitchcock, 1858. The type specimen is "Yale Peabody Mus. No. 2059". The same reviser has assigned the second species, *Otouphepus poolei* Bock, 1952 (*J. Paleont.* 26 : 407) doubtfully to the species-group of *Anchisauripus tuberosus*, *exsertus* and *parallelus*, where small size is its only sure distinction. The type specimen is "Acad. Nat. Sci. Philadelphia No. 15223".

5. It is considered that the suppression under the Plenary Powers of the generic name *Otouphepus* Cushman, 1904 and of the specific name *magnificus* Cushman, 1904, as published in the combination *Otouphepus magnificus*, as *nomina dubia*, is desirable under Decision 26 of the Fourteenth International Congress of Zoology, Copenhagen, 1953 (1953, *Copenhagen Decisions zool. Nomencl.* : 24-25) for the following reasons :—

- (a) The characteristics considered diagnostic by Cushman are not morphological but artifacts. All specimens referred to the genus *Otouphepus* are distorted in preservation, and the type specimens are indeterminate.
- (b) *Otouphepus magnificus* is most similar (as its author Cushman noted) to *Ornithoidichnites sillimani* Hitchcock, 1843 (*Assoc. Amer. Geologists Naturalists Rep.* 1843 : 256), the type species of the currently accepted genus *Anchisauripus* Lull, 1904. If these two nominal species should be congeneric or, even, as seems probable though not provable, synonymous, then the name *Otouphepus* Cushman which was published one month earlier than *Anchisauripus* Lull, would take priority over that name. Thus a name applied to four obscure and heterogeneous specimens would replace the firmly established name for the best-known dinosaur footprint genus—a genus of world-wide distribution, represented by thousands of specimens assigned to several species. To relegate to synonymy a name such as *Anchisauripus* Lull which has been accepted and used for more than fifty years by all workers in the field would be a gross violation of the conservation principle.

6. As part of the present application it is proposed that the name *Anchisauripus* Lull, 1904, should be placed on the *Official List of Generic Names in Zoology* and thus be put beyond risk of further attack. Lull designated as the type species of this genus the nominal species *Eubrontes dananus* Hitchcock, 1845 (*Assoc. Amer. Geologists Naturalists Rep.* 1845 : 23). That nominal species is, however, objectively identical with *Ornithoidichnites sillimani* Hitchcock, 1843 (paragraph 5(b) above). This was pointed out by Lull in 1915 (*Connecticut geol. nat. Hist. Survey Bull.* 24 : 181) and all subsequent authors have cited the type species of *Anchisauripus* Lull, 1904, under this name. This is in full accord with a recent decision by the International Commission in its *Declaration* 21 (1956, *Ops. Decls. int. Comm. zool. Nomencl.* 12 : i-viii) under which it is prescribed that, where one of two or more objectively identical nominal species is designated, indicated or selected as the

type species of a genus, that genus shall be cited as having as its type species the oldest established of the nominal species concerned. Thus, the specific name *sillimani* Hitchcock, 1843, should now be placed on the *Official List of Specific Names in Zoology* as the specific name of the type species of *Anchisauripus* Lull, 1904, while the objectively invalid name *dananus* Hitchcock, 1845, should be placed on the *Official Index of Rejected and Invalid Specific Names in Zoology*. At the same time there should also be placed on the above *Official Index* another objectively invalid junior synonym of *sillimani* Hitchcock, 1843, namely *sillimanium* Hitchcock, 1847 (*Amer. J. Sci.* (2) 4 : 49), as published in the combination *Brontozoum sillimanium*.

7. The generic name *Anchisauripus* Lull, 1904, was taken as the base for the family-group name ANCHISAURIPODIDAE by Lull in 1904 (: 486) at the time when he published this generic name. The above family-group name should now be placed on the *Official List*. In 1915 (*Connecticut geol. nat. Hist. Surv. Bull.* 24 : 187) Lull, who then still accepted the generic name *Otouphepus* Cushman, erected the nominal family-group OTOUPHEPODIDAE. Under a decision by the Commission in its *Declaration* 20 (1955, *Ops. Decls. int. Comm. zool. Nomencl.* 10 : i-viii), the suppression by the International Commission of a generic name under its Plenary Powers carries with it automatically the suppression also under the same Powers of any family-group name based on that generic name. Since under the present proposals the Commission is being asked to use its Plenary Powers to suppress the generic name *Otouphepus* Cushman, that proposal carries with it a proposal that the family-group name OTOUPHEPODIDAE Lull, 1915, should be suppressed under those Powers. It is accordingly proposed that that family-group name should now be placed on the *Official Index of Rejected and Invalid Family-Group Names in Zoology*.

8. For the reasons set out in the present application the International Commission on Zoological Nomenclature is now asked :—

- (1) to use its Plenary Powers to suppress the under-mentioned names for the purposes of the Law of Priority but not for those of the Law of Homonymy :—
 - (a) the generic name *Otouphepus* Cushman (J.A.), 1904 ;
 - (b) the specific name *magnificus* Cushman (J.A.), 1904, as published in the combination *Otouphepus magnificus* ;
- (2) to place the under-mentioned generic name on the *Official List of Generic Names in Zoology* : *Anchisauripus* Lull, 1904 (gender : masculine) (type species by original designation of *Eubrontes dananus* Hitchcock, 1845, and through *Declaration* 21 : *Ornithoidichnites silliamani* Hitchcock, 1843) ;
- (3) to place the under-mentioned specific name on the *Official List of Specific Names in Zoology* : *sillimani* Hitchcock, 1843, as published in the combination *Ornithoidichnites sillimani* (specific name of type species of *Anchisauripus* Lull, 1904) ;

- (4) to place on the *Official Index of Rejected and Invalid Generic Names in Zoology* the generic names specified in (1)(a) above as there suppressed under the Plenary Powers ;
- (5) to place the under-mentioned specific names on the *Official Index of Rejected and Invalid Specific Names in Zoology* :—
- (a) the specific name specified in (1)(b) above as there suppressed under the Plenary Powers ;
 - (b) the under-mentioned specific names, each of which is a junior objective synonym of *sillimani* Hitchcock, 1843, as published in the combination *Ornithoidichnites sillimani* :—
 - (i) *dananus* Hitchcock, 1845, as published in the combination *Eubrontes dananus* ;
 - (ii) *sillimanium* Hitchcock, 1847, as published in the combination *Brontozoum sillimanium* ;
- (6) to place the under-mentioned family-group name on the *Official List of Family-Group Names in Zoology* : ANCHISAURIPODIDAE Lull, 1904 (type genus : *Anchisauripus* Lull, 1904) ;
- (7) to place the under-mentioned family-group name on the *Official Index of Rejected and Invalid Family-Group Names in Zoology* :—OTOUPHEPODIDAE Lull, 1915 (type genus : *Otouphepus* Cushman (J.A.), 1915) (invalid under Declaration 20, through the suppression under the Plenary Powers of *Otouphepus* Cushman (J.A.), 1904, the name of the type genus of the family-group taxon so named).

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THE BULLETIN OF ZOOLOGICAL NOMENCLATURE

The Official Organ of
THE INTERNATIONAL COMMISSION ON
ZOOLOGICAL NOMENCLATURE

Edited by

FRANCIS HEMMING, C.M.G., C.B.E.

Secretary to the International Commission on Zoological Nomenclature



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BULLETIN OF ZOOLOGICAL NOMENCLATURE

Volume 12, Part 9 (pp. 225-256)

28th September 1956

NOTICES PRESCRIBED BY THE INTERNATIONAL CONGRESS OF ZOOLOGY

The following notices are given in pursuance of decisions taken, on the recommendation of the International Commission on Zoological Nomenclature (see 1950, *Bull. zool. Nomencl.* 4 : 51-56, 57-59), by the Thirteenth International Congress of Zoology, Paris, July 1948 (see 1950, *Bull. zool. Nomencl.* 5 : 5-13, 131).

(a) Date of commencement by the International Commission on Zoological Nomenclature of Voting on applications published in the " Bulletin of Zoological Nomenclature "

NOTICE is hereby given that normally the International Commission will start to vote upon applications published in the *Bulletin of Zoological Nomenclature* on the expiry of a period of six calendar months from the date of publication in the *Bulletin* of the applications in question. Any specialist who may desire to comment upon any of the applications published in the present Part (Vol. 12, Part 9) of the *Bulletin* is accordingly invited to do so in writing to the Secretary to the Commission, as quickly as possible and in any case, in sufficient time to enable the communication in question to reach the Secretariat of the Commission before the expiry of the six-month period referred to above.

(b) Notice of the possible use by the International Commission on Zoological Nomenclature of its Plenary Powers in certain cases.

NOTICE is hereby given that the possible use by the International Commission on Zoological Nomenclature of its Plenary Powers is involved in applications published in the present Part of the *Bulletin of Zoological Nomenclature* in relation to the following cases :—

- (1) Rafinesque, 1814-1818, names published by, for genera and species, in the Orders Decapoda and Stomatopoda, suppression of (Class Crustacea) (Z.N.(S.) 374) ;
- (2) *cruentatus* Linnaeus, 1758, *cubicus* Forskål, 1775, and *novemdecos* Sulzer, 1776, all published in combination with the generic name *Cancer* (Class Crustacea, Order Decapoda), suppression of (Z.N.(S.) 374) ;

Notices prescribed by the International Congress of Zoology (*continued*)

- (3) URINATORIDAE Vieillot, 1818, suppression of, in favour of GAVIIDAE Coues, 1903 (Class Aves) (Z.N.(S.) 1150);
- (4) *Peltura*, validation of emendation to, of *Peltoura* Milne Edwards (H.), 1840 (Class Trilobita) (Z.N.(S.) 1034).

2. Comments received in sufficient time will be published in the *Bulletin*: other comments, provided that they are received within the prescribed period of six calendar months from the date of publication of the present Part will be laid before the International Commission on Zoological Nomenclature at the time of commencement of voting on the application concerned.

3. In accordance with the procedure agreed upon at the Session held by the International Commission on Zoological Nomenclature in Paris in 1948 (see 1950, *Bull. zool. Nomencl.* 4 : 56), corresponding Notices have been sent to the serial publications *Nature* and *Science*.

FRANCIS HEMMING

*Secretary to the International Commission on
Zoological Nomenclature*

28 Park Village East, Regent's Park,
LONDON, N.W.1, England.

28th September 1956.

PROPOSED SUPPRESSION UNDER THE PLENARY POWERS (a) OF CERTAIN NAMES GIVEN BY C. S. RAFINESQUE TO GENERA AND SPECIES OF THE ORDERS DECAPODA AND STOMATOPODA (CLASS CRUSTACEA) AND (b) OF CERTAIN SPECIFIC NAMES CURRENTLY REGARDED AS SENIOR SUBJECTIVE SYNONYMS OF THE NAMES OF THE TYPE SPECIES OF THE GENERA "HOMOLA" AND "LISSA", BOTH OF LEACH, 1815, BELONGING TO THE FOREGOING CLASS

By **L. B. HOLTHUIS**

(*Rijksmuseum van Natuurlijke Historie, Leiden, Holland*)

(Commission Reference : Z.N.(S.) 374)

New Decapoda and Stomatopoda are described or mentioned by C. S. Rafinesque in four of his numerous publications. These four papers are :

1814. *Précis des découvertes et travaux somiologiques de Mr. C. S. Rafinesque-Schmaltz. entre 1800 et 1814. Ou choix raisonné de ses principales Découvertes en Zoologie et en Botanique, pour servir d'introduction à ses ouvrages futurs* : 1-55.
1815. *Analyse de la Nature ou Tableau de l'Univers et des Corps organisés* : 1-224.
1817. "Synopsis of four New Genera and ten new Species of Crustacea, found in the United States. Museum of Natural Sciences. 9." *Amer. mon. Mag. crit. Rev.* 2 : 40-43.
1818. "Journal of the Academy of Natural Sciences of Philadelphia. Vol. i, Part I. Philadelphia. 8vo. pp. 220, and 9 plates. May to December, 1817." *Amer. mon. Mag. crit. Rev.* 3 : 269-274

2. The first of these papers contains the description of seventeen new species and eight new genera of Decapoda and two new species of Stomatopoda, all from Sicily. The second publication gives a classification of the Animal and Plant Kingdoms down to genera. Most of the new generic names given here by Rafinesque are *nomina nuda*, the exceptions being a few names, which he proposed to replace already published names. In the third paper ten new species of Decapod Crustacea from the United States are described, while two new generic names of Decapoda are mentioned. In the fourth publication two new names are proposed for Brachyuran genera. The carcinological names of Rafinesque generally have been overlooked and as far as I know only one generic and one specific name given by this author to Decapod Crustacea are used in modern carcinological literature. The following table gives the names of species and new genera of Decapod and Stomatopod Crustacea, used by Rafinesque in the four publications mentioned above,

with the names, which in recent literature currently are employed for those species and genera.

<i>Names of Rafinesque</i>	<i>Current modern names</i>
<i>Acilius</i> Rafinesque, 1815 : 221 (substit. pro <i>Symethus</i> Rafinesque, 1814)	<i>Atyaephyra</i> De Brito Capello, 1867
<i>Aglaope</i> Rafinesque, 1814 : 24 (non Latreille, 1809)	<i>Lysmata</i> Risso, 1816
<i>Aglaope striata</i> Rafinesque, 1814 : 24	<i>Lysmata seticaudata</i> (Risso, 1816)
<i>Albunea symnista</i> (Linnaeus, 1758) Rafinesque, 1814 : 20	<i>Albunea carabus</i> (Linnaeus, 1758)
<i>Alciope</i> Rafinesque, 1814 : 24	<i>Pontonia</i> Latreille, 1829
<i>Alciope heterochelus</i> Rafinesque, 1814 : 24	<i>Pontonia flavomaculata</i> Heller, 1864
<i>Astacus ciliaris</i> Rafinesque, 1817 : 42	<i>Cambarus bartoni</i> (Fabricius, 1798)
<i>Astacus fossor</i> Rafinesque, 1817 : 42	<i>Cambarus diogenes</i> Girard, 1852
<i>Astacus limosus</i> Rafinesque, November, 1817 : 42	<i>Orconectes affinis</i> (Say, December, 1817)
<i>Astacus pusillus</i> Rafinesque, 1817 : 42	<i>Cambarus bartoni</i> (Fabricius, 1798)
<i>Astacus rugosus</i> Rafinesque, 1814 : 22	<i>Nephrops norvegicus</i> (Linnaeus, 1758)
<i>Byzenus</i> Rafinesque, 1814 : 23	<i>Stenopus</i> Latreille, 1819
<i>Byzenus scaber</i> Rafinesque, 1814 : 23	<i>Stenopus spinosus</i> Risso, 1826
<i>Cancer levifrons</i> Rafinesque, 1814 : 20	<i>Xantho poressa</i> (Olivi, 1792)
<i>Cancer portunoides</i> Rafinesque, 1814 : 20	<i>Bathynectes longipes</i> (Risso, 1816)
<i>Cancer villosissimus</i> Rafinesque, 1814 : 20	<i>Pilumnus hirtellus</i> (Linnaeus, 1758)
<i>Crangonus</i> Rafinesque, 1815 : 98 (substit. pro <i>Crangon</i> Fabricius, 1798)	<i>Crangon</i> Fabricius, 1798
<i>Cryptopthalmus</i> Rafinesque, 1814 : 23	<i>Alpheus</i> Fabricius, 1798
<i>Cryptopthalmus ruber</i> Rafinesque, 1814 : 23	<i>Alpheus glaber</i> (Olivi, 1792)
<i>Everne</i> Rafinesque, 1815 : 98 (substit. pro <i>Melicertus</i> Rafinesque, 1814)	<i>Penaeus</i> Fabricius, 1798
<i>Grapsus fluviatilis</i> (Herbst, 1785) Rafinesque, 1814 : 21	<i>Potamon edulis</i> (Latreille, 1818)
<i>Grapsus limosus</i> Rafinesque, November, 1817 : 42	<i>Sesarma</i> (<i>Sesarma</i>) <i>reticulatum</i> (Say, September, 1817)

- Hippa achiria* (Mitchill MSS) Rafinesque, November, 1817 : 41 (by typographical error printed as *Hippaachiria*)
- Emerita talpoida* (Say, November, 1817)
- Inachus levigatus* Rafinesque, 1814 : 21
- Acanthonyx lunulatus* (Risso, 1816)
- Inachus tomentosus* Rafinesque, 1814 : 21
- Pisa* prob. *tetraodon* (Pennant, 1777)
- Lissula* Rafinesque, 1818 : 272
- Lissa* Leach, 1815
- Lupania* Rafinesque, 1818 : 272
- Portunus* Weber, 1795
- Melicertus* Rafinesque, 1814 : 22
- Penaeus* Fabricius, 1798
- Melicertus tigrinus* Rafinesque, 1814 : 22
- Penaeus kerathurus* (Forskål, 1775)
- Mesapus* Rafinesque, 1814 : 22
- Pontophilus* Leach, 1817
- Mesapus fasciatus* Rafinesque, 1814 : 23
- Pontophilus fasciatus* (Risso, 1816)
- Nectoceras* Rafinesque, 1817 : 41
- [?] *Hippolyte* Leach, 1815
- Nectoceras pelagica* Rafinesque, 1817 : 41
- [?] *Hippolyte coerulescens* (Fabricius, 1775)
- Nectylus* Rafinesque, 1817 : 41
- Emerita* Meuschen, 1778
- Nectylus rugosus* Rafinesque, November, 1817 : 41
- Emerita talpoida* (Say, November, 1817)
- Niphea* Rafinesque, 1815 : 98 (substit. pro *Aglaope* Rafinesque, 1814)
- Lyсмata* Risso, 1816
- Ocypoda fluviatilis* (Herbst, 1785) Rafinesque, 1814 : 21
- Potamon edulis* (Latreille, 1818)
- Ocypoda pusilla* Rafinesque, 1817 : 42
- [?] *Uca pugnax* Smith, 1870
- Ocypoda unispinosa* Rafinesque, 1814 : 21
- Goneplax rhomboides* (Linnaeus, 1758)
- Pagurus granulatus* Rafinesque, 1814 : 22 (non Olivier, 1812)
- Pagurus alatus* Fabricius, 1775
- Pagurus truncatulus* Rafinesque, November, 1817 : 42
- Pagurus longicarpus* Say, December, 1817
- Peneus quadricolor* Rafinesque, 1814 : 22
- Gnathophyllum elegans* (Risso, 1816)
- Portunus menoides* Rafinesque, 1817 : 42
- Carcinus maenas* (Linnaeus, 1758)
- Squilla crocea* Rafinesque, 1814 : 25
- Lysiosquilla eusebia* (Risso, 1816)
- Squilla triodona* Rafinesque, 1814 : 24
- Pseudosquilla ferussaci* (Roux, 1828)

<i>Syllarus</i> Rafinesque, 1815 : 98 (substit. pro <i>Scyllarus</i> Fabricius, 1775)	<i>Scyllarus</i> Fabricius, 1775
<i>Symethus</i> Rafinesque, 1814 : 23	<i>Atyaephyra</i> De Brito Capello, 1867
<i>Symethus fluviatilis</i> Rafinesque, 1814 : 23	<i>Atyaephyra desmarestii</i> (Millet, 1831)
<i>Symnista</i> Rafinesque, 1815 : 98 (substit. pro <i>Albunea</i> Fabricius, 1798)	<i>Albunea</i> Weber, 1795
<i>Thelxiope</i> Rafinesque, 1814 : 21	<i>Homola</i> Leach, 1815
<i>Thelxiope palpigera</i> Rafinesque, 1814 : 21	<i>Homola barbata</i> (Fabricius, 1793)

3. If Rafinesque's names were to be accepted, the following generic names would have to be changed : *Atyaephyra* De Brito Capello, 1867, to *Symethus* Rafinesque, 1814 ; *Homola* Leach, 1815, to *Thelxiope* Rafinesque, 1814 ; *Lysmata* Risso, 1816, to *Niphea* Rafinesque, 1815 ; *Pontonia* Latreille, 1829, to *Alciope* Rafinesque, 1814 ; *Pontophilus* Leach, 1817, to *Mesapus* Rafinesque, 1814 ; *Stenopus* Latreille, 1819, to *Byzenus* Rafinesque, 1814. This is the more serious since *Homola* and *Stenopus* are the type genera of the families HOMOLIDAE and STENOPODIDAE respectively. In addition, a special problem would arise in connection with the generic name *Alciope* Rafinesque, 1814, which would replace the name *Pontonia* Latreille, 1829, a name which has already been placed on the *Official List of Generic Names in Zoology* by the Ruling given in *Opinion* 378 (1956, *Ops. Decls. int. Comm. zool. Nomencl.* 11 : 411-420) and is moreover the name of the type genus of the family-group taxon PONTONINAE (correction of PONTONINAE) Kingsley, 1878, the name which has been placed on the *Official List of Family-Group Names in Zoology* by the Ruling given in *Direction* 41 (1956, *Ops. Decls. int. Comm. zool. Nomencl.* 11 : 431-452).

4. In addition to the problems in connection with generic names discussed above, the acceptance of Rafinesque's names would involve the following changes at the specific-name level :—*Acanthonyx lunulatus* (Risso, 1816) would become *Acanthonyx levigatus* (Rafinesque, 1814) ; *Atyaephyra desmarestii* (Millet, 1831) would become *Symethus fluviatilis* Rafinesque, 1814 ; *Bathynectes longipes* (Risso, 1816) would become *Bathynectes fortunoides* (Rafinesque, 1814) ; *Cambarus diogenes* Girard, 1852, would become *Cambarus fossor* (Rafinesque, 1817) ; *Gnathophyllum elegans* (Risso, 1816) would become *Gnathophyllum quadricolor* (Rafinesque, 1814) ; *Lysiosquilla eusebia* (Risso, 1816) would become *Lysiosquilla crocea* (Rafinesque, 1814) ; *Lysmata seticaudata* (Risso, 1816) would become *Niphea striata* (Rafinesque, 1814) ; *Orconectes affinis* (Say, 1817) would become *Orconectes limosus* (Rafinesque, 1817) ; *Pagurus longicarpus* Say, 1817, would become *Pagurus truncatulus* Rafinesque, 1817 ; *Pontonia flavomaculata* Heller, 1864, would become *Alciope heterochelus* Rafinesque, 1814 ; *Pontophilus fasciatus* (Risso, 1816) would become *Mesapus fasciatus* Rafinesque, 1814 ; *Pseudosquilla ferussaci* (Roux, 1828) would become *Pseudosquilla triodona*

(Rafinesque, 1814); *Stenopus spinosus* Risso, 1826, would become *Byzenus scaber* Rafinesque, 1814; *Uca pugnax* Smith, 1870, would become *Uca pusilla* (Rafinesque, 1817). Thus six generic and fourteen specific names would have to be changed if the scientific names proposed by Rafinesque were to be accepted. The changing of all these names would greatly upset carcinological nomenclature, the more so as the species involved generally are common taxa from thoroughly explored regions such as the Mediterranean and the American East Coast. I find that more than one hundred authors have used the generic name *Pontophilus*, eighty the name *Stenopus*, about the same number have used *Lysmata*, about seventy have used *Pontonia*, and fifty the name *Atyaephyra*. The specific name *desmarestii* for the species at present best known as *Atyaephyra desmarestii* has been used by about eighty authors, the name *seticaudata* of *Lysmata seticaudata* by about seventy authors, the name *elegans* of *Gnathophyllum elegans* by more than fifty authors, the name *spinosus* of *Stenopus spinosus* by about thirty authors, the name *eusebia* of *Lysiosquilla eusebia* by over twenty authors, and the names *flavomaculata* of *Pontonia flavomaculata*, and *ferussaci* of *Pseudosquilla ferussaci* each by about fifteen authors. Not enough data are at my disposal to give an approximate number of authors using the current names of the Brachyura and Anomura, but the number involved is also considerable. Only two of Rafinesque's names for Decapods are used by part of the modern authors. One of these names is the generic name *Thelziope* Rafinesque, which Rathbun (1937, *Bull. U.S. nat. Mus.* 166 : 63) showed to be the oldest name for the genus *Homola* Leach, 1815; she has been followed by a few modern authors (Chace, 1940, *Torreia* 4 : 8; Gordon, 1950, *Sci. Rep. John Murray Exped.* 9(3) : 221; Barnard, 1950, *Ann. S. Afr. Mus.* 38 : 338), while Dr. Th. Monod of Dakar informs me that in his as yet unpublished monograph of the West African Crabs he also proposes to use the name *Thelziope*. In the recent monographic account by Bouvier (1940, *Faune de France* 37 : 192) of the Decapoda Reptantia of the French coasts, the name *Homola* is still used, while several other authors do not accept Rafinesque's name. The specific compound *limosus* of *Astacus limosus* Rafinesque, is used by a number of authors for the species *Orconectes affinis* (Say). Ortmann (1905, *Proc. Amer. phil. Soc.* 44 : 107, 112, 131) was the first to point to the identity of Say's and Rafinesque's species and showed that Rafinesque's name was published one month before that of Say, so that the name *limosus* has priority and should be used. Most American authors at present follow Ortmann. None of the other generic or specific names proposed by Rafinesque for Decapoda and Stomatopoda has ever been accepted. They have been mentioned in a footnote or in a short remark in some of the more or less monographic works of the first half of the last century, e.g. by Desmarest (1825, *Consid. gén. Class. Crust.* : 134, 214–216) and by H. Milne Edwards (1837, *Hist. nat. Crust.* 2 : 49, 408, 420, 430, 431); but they have not been adopted by those, or by any subsequent, authors.

5. In my opinion it is desirable, in order to avoid very serious confusion in carcinological nomenclature, to suppress all the overlooked names of Crustacea

Decapoda and Stomatopoda proposed in the works of Rafinesque. Since the generic name *Thelxiope* Rafinesque is used by several American authors and generally is neglected by European workers, I asked Dr. Fenner A. Chace, Jr., Curator of the Division of Marine Invertebrates of the U.S. National Museum at Washington, D.C., for his opinion on this question. Dr. Chace answered as follows:—"As far as your suggestion to apply to the Commission for suppression of this name is concerned, I have no objections. After all, *Thelxiope* has been resurrected fairly recently and has not yet become firmly entrenched in the literature." Dr. Isobel Gordon concerning the name *Thelxiope* wrote me as follows:—"I reluctantly used *Thelxiope* in my "John Murray" Report. I favour suppressing that with the other Rafinesque names." Dr. Th. Monod, on the other hand, favours the retention of *Thelxiope*:—"J'ai suivi Rathbun dans mes crabes ouest-africains et utilisé *Thelxiope*. Je serais donc, en principe, en faveur d'une nouvelle exception en sa faveur, à la demande de suppression générale des noms de Rafinesque." Dr. J. Forest (*Muséum National d'Histoire naturelle, Paris*) has also expressed himself (*in litt.*) as being, opposed to the suppression of *Thelxiope*:—"Je crois que la majorité des carcinologistes ont repris *Thelxiope* Rafinesque. Suivons les . . . mais je regrette que Rathbun ait ressuscité ce nom." Dr. R. Zariquiey Alvarez of Barcelona has informed me (*in litt.*) that he prefers to use the name *Homola*, though he would not oppose its substitution by *Thelxiope* if most other carcinologists are in favour of validating the latter name. Dr. H. Balss, of Munich, has informed me (*in litt.*):—"auch ich verwende den Namen *Thelxiope* nicht, sondern bleibe bei *Homola*." Personally, I believe that the suppression of the name *Thelxiope* is to be preferred, *Homola* being a widely used name, while *Thelxiope* has only recently been reintroduced. Furthermore, if in connection with the name *Thelxiope* the Priority Principle is strictly adhered to, this course will have to be followed also with the specific name of the type species of that genus, which is at present currently known as *Homola barbata* (Fabricius, 1793), but which possesses two senior synonyms, which until now have always been overlooked by carcinologists and the suppression of which is here requested. Since the specific compound *limosus* of the name *Orconectes limosus* (Rafinesque) is at present widely accepted in American literature and is even used in European publications, there would seem to be no advantage in suppressing this name. Consequently I ask here for the suppression of all generic and specific names for Decapod and Stomatopod Crustacea proposed by Rafinesque with the sole exception of the just mentioned specific name *limosus*.

6. It may be emphasised here that the suppression of Rafinesque's names is not asked because of the poor quality of his work, but because of the fact that, contrary to the *Règles*, these names have never been accepted by contemporary and later carcinologists. Doing justice to this too little appreciated author would involve so many changes in carcinological nomenclature that it seems best to continue the practice of not using his names. The fact that so many of the descriptions make it possible to identify Rafinesque's species is sufficient evidence that he was not as poor a systematist as he has often said to have been.

7. Only one of Rafinesque's Decapod genera has been made the type genus of a family. This genus is *Thelxiope* Rafinesque, 1814. The rather complicated synonymy of this family group name is the following:—

THELXIOPÉDÉS Leach, 1819, *Dict. Sci. nat.* **13** : 512

THELXIOPÉDÉES Desmarest, 1823, *Dict. Sci. nat.* **28** : 252

HOMOLIENS H. Milne Edwards, 1837, *Hist. nat. Crust.* **2** : 167, 180

HOMOLIDÆ White, 1847, *List Crust. Brit. Mus.* : 55

THELXIOPEIDÆ Rathbun, 1937, *Bull. U.S. nat. Mus.* **166** : 61

THELXIOPEIDÆ Rathbun, 1937, *Bull. U.S. nat. Mus.* **166** : 62

The first three names are vernacular names and thus have no nomenclatorial standing. The name HOMOLIDÆ White, 1847, is the first available name for the family group to which the genus *Homola* belongs, and the currently accepted family name HOMOLIDÆ thus is a valid name.

8. Two more questions have to be considered before the status of the Rafinesque names can be finally settled by the Commission. These questions concern the names of the type species of the genera *Homola* Leach, 1815, and *Lissa* Leach, 1815, the insertion of which in the *Official List* is requested here.

9. The type species of the genus *Homola* Leach, 1815, is *Homola spinifrons* Leach (1815, *Trans. linn. Soc. Lond.* **11** : 324), a species which is currently known by the name *Homola barbata* (Fabricius, 1793), *Cancer barbatus* Fabricius being a senior subjective synonym of *Homola spinifrons* Leach. A study of the literature reveals, however, that *Cancer barbatus* Fabricius, 1793 (*Ent. syst.* **2** : 460) is not the oldest available name for this species. Both the names *Cancer cubicus* Forskål, 1775 (*Descript. Anim.* : 89) and *Cancer novemdecos* Sulzer, 1776 (*Abgekürzte Gesch. Ins.* : 265, pl. 31, fig. 4) prove to be senior subjective synonyms of *Cancer barbatus* Fabricius. As far as is known to me neither the specific name *cubicus* Forskål nor the name *novemdecos* Sulzer has ever been used for the species in question during the last 150 years. During that period the species has been indicated by most authors either as *Homola barbata* or as *Homola spinifrons*. The latter name gradually disappeared, and *barbata* is the specific name which is used in all modern handbooks. The replacement of this well-known and widely-used name by the long-forgotten name *cubicus* Forskål would badly upset the nomenclatorial stability of the group and would cause serious confusion. This could, however, be prevented by the suppression under the Plenary Powers of the names *cubicus* and *novemdecos*.

10. The problem concerning the name for the type species of the genus *Lissa* Leach is very similar. The type species of this genus is *Cancer chiragra* Fabricius, 1775 (*Syst. Ent.* : 409). The specific name *chiragra* Fabricius is widely used to denote the species and as far as I can ascertain, it is the only

name that has been used for it since the introduction of the generic name *Lissa*. There can be little doubt, however, that the name *Cancer chiragra* Fabricius, 1775, is a junior subjective synonym of *Cancer cruentatus* Linnaeus, 1758 (*Syst. Nat.* (ed. 10) 1 : 630). The name *cruentatus* Linnaeus was used by one or two authors in the XVIIIth century but has since been entirely overlooked. There seems to be little sense in resurrecting this long-forgotten name, even though it was introduced by Linnaeus for a species which was described in such a way by this great Swedish author that it still is recognisable from the original description.

11. Both Dr. Isobel Gordon of the British Museum (Natural History), London, and Dr. R. Zariquiey Alvarez of Barcelona, have informed me that they are in favour of the use of the Plenary Powers to save the names *barbata* (in the case dealt with in paragraph 9 above) and *chiragra* Fabricius (in the case dealt with in paragraph 10). On the other hand Dr. Th. Monod of Dakar and Dr. J. Forest of Paris favour here the strict application of the normal provisions of the *Règles*. Concerning the name *chiragra* Fabricius Dr. Monod (*in litt.*) has remarked " L'avantage du retour à un nom linnéen est que l'on atteint un *terminus ad quem* qui garanti contre tout danger ultérieur de modification nouvelle ". Though I agree with the principle underlying Dr. Monod's remark, I believe that by being placed on the *Official List* under the Plenary Powers of the Commission, the name *chiragra* Fabricius would be even better safeguarded against change than would the above Linnean name. Personally, therefore, I am in favour of the use of the Plenary Powers both in the case of *Cancer barbatus* Fabricius and of *Cancer chiragra* Fabricius.

12. The concrete proposals which I now submit for consideration are that the International Commission on Zoological Nomenclature should :—

(1) use its Plenary Powers :—

(a) to suppress the under-mentioned generic names for the purposes of the Law of Priority but not for those of the Law of Homonymy :—

- (i) *Acilius* Rafinesque, 1815, *Anal. Nat.* : 221 (substitute name for *Symethus* Rafinesque, 1814, *Préc. Découv. somiol.* : 23) (type species, by monotypy through *Symethus* Rafinesque: *Symethus fluviatilis* Rafinesque, 1814, *Préc. Découv. somiol.* : 23);
- (ii) *Alciope* Rafinesque, 1814, *Préc. Découv. somiol.* : 24 (type species, by monotypy : *Alciope heterochelus* Rafinesque, 1814, *Préc. Découv. somiol.* : 24);
- (iii) *Byzenus* Rafinesque, 1814, *Préc. Découv. somiol.* : 23 (type species, by monotypy : *Byzenus scaber* Rafinesque, 1814, *Préc. Découv. somiol.* : 23);

- (iv) *Mesapus* Rafinesque, 1814, *Préc. Découv. somiol.* : 22 (type species, by monotypy : *Mesapus fasciatus* Rafinesque, 1814, *Préc. Découv. somiol.* : 23);
 - (v) *Nectoceras* Rafinesque, 1817, *Amer. monthly Mag. crit. Rev.* 2 : 41 (type species, by monotypy : *Nectoceras pelagica* Rafinesque, 1817, *Amer. monthly Mag. crit. Rev.* 2 : 41);
 - (vi) *Niphea* Rafinesque, 1815, *Analyse Nature* : 98 (substitute name for *Aglaope* Rafinesque, 1814, *Préc. Découv. somiol.* : 24) (type species, by monotypy through *Aglaope* Rafinesque : *Aglaope striata* Rafinesque, 1814, *Préc. Découv. somiol.* : 24);
 - (vii) *Symethus* Rafinesque, 1814, *Préc. Découv. somiol.* : 23 (type species by monotypy : *Symethus fluviatilis* Rafinesque, 1814, *Préc. Découv. somiol.* : 23);
 - (viii) *Thelxiope* Rafinesque, 1814, *Préc. Découv. somiol.* : 21 (type species, by monotypy : *Thelxiope palpigera* Rafinesque, 1814, *Préc. Découv. somiol.* : 21);
- (b) to suppress the under-mentioned specific names for the purposes of the Law of Priority but not for those of the Law of Homonymy :—
- (i) *achiria* Rafinesque, 1817, *Amer. monthly Mag. crit. Rev.* 2 : 41, as published in the combination *Hippa achiria*;
 - (ii) *crocea* Rafinesque, 1814, *Préc. Découv. somiol.* : 25, as published in the combination *Squilla crocea*;
 - (iii) *cruentatus* Linnaeus, 1758, *Syst. Nat.* (ed. 10) 1 : 630, as published in the combination *Cancer cruentatus*;
 - (iv) *cubicus* Forskål, 1775, *Descrip. Anim.* : 89, as published in the combination *Cancer cubicus*;
 - (v) *fasciatus* Rafinesque, 1814, *Préc. Découv. somiol.* : 23, as published in the combination *Mesapus fasciatus*;
 - (vi) *fluviatilis* Rafinesque, 1814, *Préc. Découv. somiol.* : 23, as published in the combination *Symethus fluviatilis*;
 - (vii) *fossor* Rafinesque, 1817, *Amer. monthly Mag. crit. Rev.* 2 : 42, as published in the combination *Astacus fossor*;
 - (viii) *heterochelus* Rafinesque, 1814, *Préc. Découv. somiol.* : 24, as published in the combination *Alciope heterochelus*;
 - (ix) *levigatus* Rafinesque, 1814, *Préc. Découv. somiol.* : 21, as published in the combination *Inachus levigatus*;
 - (x) *novemdecos* Sulzer, 1776, *Abgekürzte Gesch. Ins.* : 265, as published in the combination *Cancer novemdecos*;

- (xi) *pelagica* Rafinesque, 1817, *Amer. monthly Mag. crit. Rev.* 2 : 41, as published in the combination *Nectoceras pelagica* ;
- (xii) *portunoides* Rafinesque, 1814, *Préc. Découv. somiol.* : 20, as published in the combination *Cancer portunoides* ;
- (xiii) *pusilla* Rafinesque, 1817, *Amer. monthly Mag. crit. Rev.* 2 : 42, as published in the combination *Ocypoda pusilla* ;
- (xiv) *quadricolor* Rafinesque, 1814, *Préc. Découv. somiol.* : 22, as published in the combination *Peneus quadricolor* ;
- (xv) *rugosus* Rafinesque, 1817, *Amer. monthly Mag. crit. Rev.* 2 : 41, as published in the combination *Nectylus rugosus* ;
- (xvi) *scaber* Rafinesque, 1814, *Préc. Découv. somiol.* : 23, as published in the combination *Byzenus scaber* ;
- (xvii) *striata* Rafinesque, 1814, *Préc. Découv. somiol.* : 24, as published in the combination *Aglaope striata* ;
- (xviii) *tomentosus* Rafinesque, 1814, *Préc. Découv. somiol.* : 21, as published in the combination *Inachus tomentosus* ;
- (xix) *triadona* Rafinesque, 1814, *Préc. Découv. somiol.* : 24, as published in the combination *Squilla triadona* ;
- (xx) *truncatulus* Rafinesque, 1817, *Amer. monthly Mag. crit. Rev.* 2 : 42, as published in the binomen *Pagurus truncatulus* ;

(2) to place the under-mentioned generic names on the *Official List of Generic Names in Zoology* :—

- (a) *Atyaephyra* de Brito Capello, 1867, *Mem. Acad. Sci. Lisboa, Sci. mat. phys. nat. (n. ser.)* 4(1)(7) : 5 (gender : feminine) (type species, by monotypy : *Atyaephyra rosiana* de Brito Capello, 1867, *Mem. Acad. Sci. Lisboa, Sci. mat. phys. nat. (n. ser.)* 4(1)(7) : 6 (a junior subjective synonym of *Hippolyte desmarestii* Millet, 1831, *Mém. Soc. Agric. Sci. Angers* 1 : 56) ;
- (b) *Homola* Leach, 1815, *Trans. linn. Soc. Lond.* 11 : 324 (gender : feminine) (type species, by monotypy : *Homola spinifrons* Leach, 1815, *Trans. linn. Soc. Lond.* 11 : 324 (a junior subjective synonym of *Cancer barbatus* Fabricius, 1793, *Ent. syst.* 2 : 460)¹ ;
- (c) *Lysmata* Risso, 1816, *Hist. nat. Crust. Nice* : 175 (substitute name for *Melicerta* Risso, 1816, *Hist. nat. Crust. Nice* : 109, an invalid junior homonym of *Melicerta* Schrank, 1803) (gender : feminine) (type species, by selection by Milne Edwards (H.), 1837 (*Cuvier's Règne Anim.* (ed. 4, Disciples ed.) 18 : pl. 54, fig. 3) : *Melicerta Seti Caudata* Risso, 1816, *Hist. nat. Crust. Nice* : 110) ;

¹ See paragraph 9 of the present application on the question of the oldest available name for the type species of this genus.

- (d) *Pontophilus* Leach, 1817, *Malac. Podophth. Brit.* (15): expl. of Pl. 37A (gender: masculine) (type species, by monotypy: *Crangon spinosus* Leach, 1815, *Trans. linn. Soc. Lond.* 11: 346);
- (e) *Stenopus* Latreille, 1819, *Nouv. Dict. Hist. nat.* (ed. 2) 30: 71 (gender: masculine) (type species, by monotypy: *Palaemon hispidus* Olivier, 1811, *Ency. méth. Hist. nat.* 8: 666);²
- (f) *Albunea* Weber, 1795, *Nomencl. ent. Fabr.*: 94 (gender: feminine) (type species, by present selection by Holthuis (L.B.): *Cancer symmysta* Linnaeus, 1758, *Syst. Nat.* (ed. 10) 1: 630);
- (g) *Lissa* Leach, 1815, *Zool. Miscell.* 2: 69 (gender: feminine) (type species, by monotypy: *Cancer chiragra* Fabricius (J.C.), 1775, *Syst. Ent.*: 409)³.

(3) to place the under-mentioned specific names on the *Official List of Specific Names in Zoology*:—

- (a) *barbatus* Fabricius, 1793, *Ent. syst.* 2: 460, as published in the combination *Cancer barbatus*;
- (b) *chiragra* Fabricius, 1775, *Syst. Ent.*: 409, as published in the combination *Cancer chiragra*;
- (c) *desmarestii* Millet, 1831, *Mém. Soc. Agric. Sci. Angers* 1: 56, as published in the combination *Hippolyte desmarestii*;
- (d) *diogenes* Girard, 1852, *Proc. Acad. nat. Sci. Phila.* 6: 88, as published in the combination *Cambarus diogenes*;
- (e) *elegans* Risso, 1816, *Hist. nat. Crust. Nice*: 92, as published in the combination *Alpheus elegans*;
- (f) *eusebia* Risso, 1816, *Hist. nat. Crust. Nice*: 115, as published in the combination *Squilla eusebia*;
- (g) *fasciatus* Risso, 1816, *Hist. nat. Crust. Nice*: 82, as published in the combination *Crangon fasciatus*;
- (h) *ferussaci* Roux, 1828, *Crust. Méditerr.*: pl. 28, as published in the combination *Squilla ferussaci*;
- (i) *flavomaculata* Heller, 1864, *Verh. zool.-bot. Ges. Wien* (14: 51, as published in the combination *Pontonia flavomaculata*;
- (j) *longicarpus* Say, 1817, *Journ. Acad. nat. Sci. Philad.* 1(8): 163, as published in the combination *Pagurus longicarpus*;

² The specific name of the type species of this genus has already been placed on the *Official List* by the Ruling given in *Opinion* 381.

³ See paragraph 10 of the present application on the question of the oldest available name for the type species of this genus.

- (k) *longipes* Risso, 1816, *Hist. nat. Crust. Nice* : 30, as published in the combination *Portunus longipes* ;
 - (l) *lunulata* Risso, 1816, *Hist. nat. Crust. Nice* : 49, as published in the combination *Maia lunulata* ;
 - (m) *pugnax* Smith, 1870, *Trans. Connect. Acad. Arts Sci.* 2 : 131, as published in the combination *Gelasimus pugnax* ;
 - (n) *seticaudata* Risso, 1816, *Hist. nat. Crust. Nice* : 110, as published in the combination *Meliceria Seti Caudata* [sic.] ;
 - (o) *spinosus* Leach, 1815, *Trans. linn. Soc. Lond.* 11 : 346, as published in the combination *Crangon spinosus* (specific name of type species of *Pontophilus* Leach, 1817) ;
 - (p) *spinosus* Risso, 1826, *Hist. nat. Europ. mérid.* 5 : 66, as published in the combination *Stenopus spinosus* ;
 - (q) *symmysta* Linnaeus, 1758, *Syst. Nat.* (ed. 10) 1 : 630, as published in the combination *Cancer symmysta* (specific name of type species of *Albunea* Weber, 1795) ;
 - (r) *talpoida* Say, 1817, *J. Acad. nat. Sci. Philad.* 1(7) : 160, as published in the combination *Hippa talpoida* ;
- (4) to place the under-mentioned generic names on the *Official Index of Rejected and Invalid Generic Names in Zoology* :—
- (a) the eight generic names suppressed under (1)(a)(i) to (1)(a)(viii) inclusive, above ;
 - (b) *Aglaope* Rafinesque, 1814, *Préc. Découv. somiol.* : 24 (type species, by monotypy : *Aglaope striata* Rafinesque, 1814, *Préc. Découv. somiol.* : 24), a junior homonym of *Aglaope* Latreille, 1809, *Gen. Crust. Ins.* 4 : 214 ;
 - (c) *Crangonus* Rafinesque, 1815, *Analyse Nature* : 98 (a junior objective synonym of *Crangon* Fabricius, 1798) ;
 - (d) *Lissula* Rafinesque, 1818, *Amer. mon. Mag. crit. Rev.* 2 : 272 (a junior objective synonym of *Lissa* Leach, 1815) ;
 - (e) *Lupania* Rafinesque, 1818, *Amer. mon. Mag. crit. Rev.* 2 : 272 (a junior objective synonym of *Portunus* Weber, 1795, the name of a genus placed on the *Official List* by the Ruling given in *Opinion* 394) ;
 - (f) *Syllarus* Rafinesque, 1815, *Analyse Nature* : 98 (a junior objective synonym of *Scyllarus* Fabricius, 1775) ;

- (g) *Symathus* Rafinesque, 1815, *Analyse Nature* : 98 (an Erroneous Subsequent Spelling for *Symethus* Rafinesque, 1814) ;
- (h) *Symnista* Rafinesque, 1815, *Analyse Nature* : 98 (a junior objective synonym of *Albunea* Weber, 1795) ;
- (5) to place on the *Official Index of Rejected and Invalid Specific Names in Zoology* the twenty specific names suppressed under (1)(b)(i) to (1)(b)(xx) (inclusive) above ;
- (6) to place on the *Official List of Family-Group Names in Zoology* the following names :—
- (a) ALBUNEIDAE (correction by Miers (1878, *J. linn. Soc. Lond., Zool.* 14 : 315) of ALBUNIDAE) Stimpson, 1858, *Proc. Acad. nat. Sci. Philad.* 1858 : 230 (type genus : *Albunea* Weber, 1795) ;
- (b) HOMOLIDAE White, 1847, *List Crust. Brit. Mus.* : 55 (type genus : *Homola* Leach, 1815) ;
- (c) STENOPODIDAE (correction by Smith & Weldon (1909, in Harmer & Shipley, *Cambridge nat. Hist.* 4 : 162) of STENOPIIDAE) Huxley, 1879, *Proc. zool. Soc. Lond.* 1878 : 785 (type genus : *Stenopus* Latreille, 1819).
- (7) to place on the *Official Index of Rejected and Invalid Family-Group Names in Zoology* the following names :—
- (a) STENOPIIDAE Huxley, 1879, *Proc. zool. Soc. Lond.* 1878 : 785 (an Invalid Original Spelling for STENOPODIDAE) ;
- (b) THELXIOPEIDAE Rathbun, 1937, *Bull. U.S. nat. Mus.* 166 : 62 (suppressed under the Plenary Powers automatically under Declaration 20 through the suppression under those Powers of the name of its type genus *Thelxiope* Rafinesque, 1814, as proposed in (1)(a)(viii) above).

PROPOSED USE OF THE PLENARY POWERS TO SECURE THAT THE FAMILY-GROUP NAME FOR THE DIVERS (LOONS) SHALL BE "GAVIIDAE" COUES, 1903, THE OLDEST FAMILY-GROUP NAME BASED ON THE GENERIC NAME "GAVIA" FORSTER, 1788, THE NAME PRESCRIBED FOR THIS GENUS BY THE RULING UNDER THE ABOVE POWERS GIVEN IN "OPINION" 401

By FRANCIS HEMMING, C.M.G., C.B.E.,

(Secretary to the International Commission on Zoological Nomenclature)

(Commission Reference : Z.N.(S.) 1150)

The object of the present application is to place before the International Commission on Zoological Nomenclature a proposal that it should use its Plenary Powers to render the family-group name GAVIIDAE Coues, 1903, the oldest available family-group name for the Divers (Loons) by suppressing the earlier name URINATORIDAE (correction of URINATOIRES) Vieillot, 1816 (Class Aves). The present application arises out of a Ruling given by the International Commission under its Plenary Powers in *Opinion* 401 on an application submitted by the Standing Committee on Ornithological Nomenclature established in 1950 by the Tenth International Ornithological Congress, Uppsala (Meinertzhagen, for the Standing Committee, 1952, *Bull. zool. Nomencl.* 9 : 6-7). Since the above *Opinion* has only just been published (24th July 1956, *Ops. Decls. int. Comm. zool. Nomencl.* 13 : 1-64), it may be convenient to note that in it the International Commission used its Plenary Powers to suppress the generic name *Colymbus* Linnaeus, 1758, and to validate the name *Podiceps* Latham, 1787 (type species : *Colymbus cristatus* Linnaeus, 1758) as the generic name for the Grebes and *Gavia* Forster, 1788 (type species : *Colymbus immer* Brünnich, 1764) as the generic name for the Divers (Loons). At the time when the application dealt with in the foregoing *Opinion* was submitted, the Commission did not normally deal with the family-group-name questions involved in applications regarding generic names and it did not do so on this occasion. The problem dealt with in the present application accordingly only came to light later when the Commission came to consider the family-group-name problems involved in the *Colymbus* case.

2. Double usage of the family name "COLYMBIDAE" : Owing to the long-standing usage of the generic name *Colymbus* Linnaeus, 1758 (*Syst. Nat.* (ed. 10) 1 : 135) both for the Divers (Loons) and for the Grebes, it was only to be expected that this generic name should have been taken as the base for a

family name COLYMBIDAE for both these groups by ornithologists of the two schools of thought concerned. The earliest references for this name as used in each of the above senses are the following :—

- (a) COLYMBIDAE Shaw, 1824, *Gen. Zool.* 12 : 230 (type genus : *Colymbus* Linnaeus, 1758, incorrectly determined as the genus for the Divers) ;
- (b) COLYMBIDAE Coues, 1903, *Key N. Amer. Birds* (ed. 5) 2 : 104 (type genus : *Colymbus* Linnaeus, 1758, correctly determined as the genus for the Grebes).

3. Under *Declaration* 20¹ a family-group name is automatically suppressed under the Plenary Powers if the name of its type genus is suppressed under those Powers. Accordingly, since under the Ruling given in the Commission's *Opinion* 401 the generic name *Colymbus* Linnaeus, 1758, has been suppressed under the Plenary Powers, the same action involved the suppression of the family-group name COLYMBIDAE. This Ruling therefore terminates the existence of the family-group name COLYMBIDAE Coues, 1903. As objectively invalid names, both the name COLYMBIDAE Shaw, 1824, and the name COLYMBIDAE Coues, 1903, should now be placed on the *Official Index of Rejected and Invalid Family-Group Names in Zoology*.

(i) The Family-Group Name for the Divers (Loons)

4. Publication of the name "GAVIIDAE" by Coues in 1903 : It was not until the beginning of the present century that American ornithologists finally took the view that the oldest available generic name for the Divers (Loons) was *Gavia* Forster, 1788 (*Enchiridion Hist. nat.* : 38). This view was based on two premises, namely, (a) that, as shown by Stejneger (L.) in 1882 (*Proc. U.S. nat. Mus.* 5 : 43) the generic name *Colymbus* Linnaeus, 1758, so long used for the Divers, was not available for this genus, its type species being a Grebe, and (b) that the generic name *Urinator* Lacépède, 1799 (paragraph 5 below), which Stejneger had adopted for the Divers was a junior subjective synonym of *Gavia* Forster, 1788. The first author to carry this view to its logical conclusion by establishing a nominal family-group taxon based on the generic name *Gavia* Forster was Coues who in 1903 (*Key N. Amer. Birds* (ed. 5) 2 : 104) published the family name GAVIIDAE.

5. The generic name "Urinator" Lacépède, 1799 : At this point it is necessary to take account of the bearing on the present case of the generic name *Urinator* Lacépède, 1799 (*Tab. Mamm. Ois.* : 14) referred to in paragraph 4 above. This nominal genus was established without cited nominal species but

¹ Published in 1955 (*Ops. Decls. int. Comm. zool. Nomencl.* 10 : i-viii).

in [1802] (in Buffon, *Hist. nat.*, Quadr. 14 : 310, 311) nominal species were cited for this genus by Lacépède himself. Five such species were then placed in this genus, two on page 310 and three on page 311. The second of the three species cited on page 311 was *Colymbus glacialis* Linnaeus, 1766 (*Syst. Nat.* (ed. 12) 1(1) : 221). This nominal species was selected by Ogilvie-Grant, 1898 (*Cat. Birds Brit. Mus.* 26 : 486) as the type species of *Urinator* Lacépède. This nominal species is currently identified with *Colymbus immer* Brünnich, 1764. As under *Opinion* 401 the latter species has been designated as the type species of *Gavia* Forster, 1788, the generic name *Urinator* Lacépède, 1799, is a junior subjective synonym, of *Gavia* Forster, 1788.

6. The family-group name "URINATORIDAE" (correction of "URINATOIRES") Vieillot, 1816 : In 1818 (*Nouv. Dict. Hist. nat.* 27 : 120) Vieillot established as a "Famille" the nominal family-group taxon URINATOIRES. After giving the characters which he regarded as diagnostic for this taxon, Vieillot stated :—"Cette Famille compose des genres HELIORNE, GREBE et PLONGEON". Of these vernacular (French) generic names, "Plongeon" was the name applied to the Divers by French ornithologists in Vieillot's day. Earlier in the same paper (: 114) Vieillot had dealt with the genus "Plongeon", for which he had cited (as he considered) the equivalent Latin generic name *Colymbus* Linnaeus. The family-group name so published by Vieillot was introduced in the correct form URINATORIDAE in 1884 (*Water Birds N. Amer.* 2 : 444) by Baird, Brewer & Ridgway who adopted the view put forward by Stejneger in 1882 (paragraph 4 above) that *Colymbus* Linnaeus was not available for the Divers (Loons) and that *Urinator* Lacépède, 1799, was the oldest available name for that genus and who completed the action implicitly required by Stejneger's conclusions by introducing the nominal family name URINATORIDAE for this genus in place of the no longer available name COLYMBIDAE.

7. The rival names "URINATORIDAE" (correction of "URINATOIRES") Vieillot, 1818, and "GAVIIDAE" Coues, 1903 : The family-group names URINATORIDAE (correction of URINATOIRES) Vieillot, 1818, and GAVIIDAE Coues, 1903, are, as we have seen, subjective synonyms of one another. Up to the year 1953 the valid name for the family-group taxon concerned would have been GAVIIDAE, for under Article 5 of the *Règles* as they existed at that time a family name had to be changed when the name of the type genus of the family had to be changed and in consequence the replacement under the Law of Priority of the name *Urinator* Lacépède, 1799, by the older name *Gavia* Forster, 1788, would have led automatically to the replacement also of the family name URINATORIDAE by the family name GAVIIDAE. The position in this matter was altered in 1953 as the result of a decision by the Fourteenth International Congress of Zoology, Copenhagen (1953, *Copenhagen Decisions zool. Nomencl.* : 36, *Decision* 54(1)(a)), which provided that "where the name of the type genus of a taxon belonging to the family-group has to be changed

because it is found to be either (i) a junior objective synonym or (ii) a junior subjective synonym, the name of the family-group taxon based on the name of that type genus is not to be changed". This decision had the praiseworthy object of limiting name-changing at the family-group-name level and it could serve that purpose whenever in the future it is necessary for either of the reasons given above to change the name of the type genus of a nominal family-group taxon. Unfortunately, however, this change in the *Règles* has in practice led to exactly the opposite result from that which it was intended to serve, for it has given rise to the emergence from synonymy of long-forgotten family-group names which have been enabled to displace well-known names in common use. This is exactly what would happen in the present case if the Commission did not intervene to prevent it. The re-emergence of the family name URINATORIDAE for the Divers would run counter to the object which the Commission set itself in *Opinion* 401, namely, the stabilisation of the Diver-name/Grebe-name problem on the basis of the acceptance of the names *Gavia* Forster and *Podiceps* Latham, and would open up a new era of name-changing in this group. It is accordingly recommended that in the interest of nomenclatorial stability and in completion of the settlement at the generic-name level by the Ruling given in the foregoing *Opinion*, the family-group name URINATORIDAE (correction of URINATOIRES) Vieillot, 1818, should be suppressed by the Commission under its Plenary Powers.

8. The specific name "arcticus" Linnaeus, 1758, as published in the combination "Colymbus arcticus": Before leaving the Diver-name side of the present case, there is one further point which calls for attention. This is in connection with the specific name *arcticus* Linnaeus, 1758 (*Syst. Nat.* (ed. 10) 1 : 135), as published in the combination *Colymbus arcticus*, which is the oldest available name for the Black-throated Diver. Throughout the whole history of the *Colymbus* case the above name played an outstanding role, for of the species originally placed in the genus *Colymbus* by Linnaeus in 1758, the species so named was the only Diver (Loon), the remaining three species cited being all Grebes. Thus, it was the inclusion of *arcticus* in *Colymbus* in 1758 which alone provided the basis on which the claim that the name *Colymbus* should be used for the Divers and not for the Grebes was later built up. For these reasons it is perhaps a matter for surprise that, in making their application to the International Commission as to the species to be designated under the Plenary Powers to be the type species of the genus *Gavia* Forster, 1788, the genus in which the Divers are in future to be placed, the applicants passed over in silence the historical claims of the Black-throated Diver (*C. arcticus* Linnaeus, 1758) to be regarded as the typical representative of the Divers and instead recommended that the species to be designated as the type species of *Gavia* Forster should be the later-established nominal species *Colymbus immer* Brünnich, 1764, the Great Northern Diver. As already noted (paragraph 1 above) the recommendation so submitted was approved by the International Commission and the name *immer* Brünnich was placed on the *Official List of Specific Names in Zoology*. The name *arcticus* Linnaeus, 1758,

was not, however, placed on the *Official List* at the same time that the name *immer* Brünnich was entered thereon. This omission was an inadvertent breach of the General Directive by the International Congress of Zoology that the Ruling given in every *Opinion* is to be comprehensive in scope and is to deal with every name involved in the case submitted. It is accordingly recommended that this matter should now be regularised by the addition of the specific name *arcticus* Linnaeus, 1758, to the *Official List*.

(ii) The Family-Group Name for the Grebes

9. The Invalid Emendation "*Podicipes*" [Oken], 1839, of the generic name "*Podiceps*" Latham, 1787 : By its Ruling given in *Opinion* 401 the International Commission, as already noted (paragraph 1 above) has taken action under its Plenary Powers to secure that the generic name *Podiceps* Latham, 1787, with *Colymbus cristatus* Linnaeus, 1758, as type species, shall be the oldest available generic name for the Grebes. Before considering the question of the family-group name based on the foregoing name, attention must be drawn to an attempt which was made to emend the spelling of that name to *Podicipes*. The first author to have made this emendation appears to have been Oken in an anonymous note published in 1839 (*Isis* (Oken) 1839 : 673). This emendation was used by various later authors, including Saunders (H.) in 1889 (*Ill. Man. Brit. Birds* : 717), whose usage of this spelling was cited in the synonymy of *Podiceps cristatus* Linnaeus given in 1940 in Volume 4 of the *Handbook of British Birds* (: 85), by Ogilvie-Grant in 1898 (*Cat. Birds Brit. Mus.* 26 : 502) and by Coues in 1903 (*Key N. Amer. Birds* (ed. 5) 2 : 1051). There is no evidence in Latham's book that the spelling *Podiceps* was an Invalid Original Spelling and accordingly under the Rules laid down by the Fourteenth International Congress of Zoology, Copenhagen, 1953 (*Copenhagen Decisions zool. Nomencl.* : 43-44, *Decision* 71) the name *Podiceps* Latham is the Valid Original Spelling of this name and the name *Podiceps* [Oken] is an Invalid Emendation. This latter name should now be placed on the *Official Index of Rejected and Invalid Generic Names in Zoology*. Further, as pointed out by Professor L. W. Grensted, the Commission's Consulting Classical Adviser, in the Report attached to the present note as an Annexe, the emendation "*Podicipes*" would have been wholly invalid and unacceptable even if "*Podiceps*" had been an Invalid Original Spelling.

10. Family-Group Name based on the generic name "*Podiceps*" Latham, 1787 : The name for the family based on the generic name *Podiceps* Latham, 1787, has been spelled in a variety of ways by different authors. As a first step, therefore, the Commission's Classical Advisor, Professor Grensted, was asked to report on which was the correct spelling for this family name. Professor Grensted's Report which, as already noted, is attached to the present paper as an Annexe, shows that the correct spelling is PODICIPITIDAE. The

first author to establish a nominal family-group taxon based on the genus *Podiceps* Latham was Bonaparte, who in 1831 established this nominal taxon under the defectively formed name PODICEPINAE. It is necessary therefore to cite this name as "PODICIPITIDAE (correction of PODICEPINAE) Bonaparte, 1831". The correct spelling PODICIPITIDAE was propounded in 1903 by Coues (*Key N. Amer. Birds* (ed. 5) 2 : 1051, footnote), although he himself then used the spelling PODICIPEDIDAE. The correct spelling was used in 1940 in the *Handbook of British Birds* (4 : 85). The following are the original references for the various Spellings which have been published for this name :—

PODICEPINAE Bonaparte, 1831, *Saggio Destr. met. Anim. Vertebr.* : 62

PODICEPSINAE Gray (G.R.), 1840, *List Gen. Birds* [ed. 1] : 76

PODICIPINAE Bonaparte, 1838, *Geogr. comp. List Birds Eur. N. Amer.* : 64

PODICIPEDIDAE Ogilvie-Grant, 1898, *Cat. Birds Brit. Mus.* 26 : 502

Bonaparte (1831 and 1838) and Gray (1840) used the correct spelling *Podiceps* for this generic name, while (as already noted) Ogilvie-Grant (1898) used the Invalid Emendation *Podicipes* [Oken], this being, no doubt, the reason for the peculiar form adopted by him for the family name. The name PODICIPITIDAE (correction of PODICEPINAE) Bonaparte, 1831, should now be placed on the *Official List of Family-Group Names in Zoology*, while the following entries should be made on the corresponding *Official Index* :—PODICEPINAE Bonaparte, 1831 (an Invalid Original Spelling for PODICIPITIDAE), together with the following Erroneous Subsequent Spellings for the above name :—PODICEPSINAE Gray (G.R.), 1840 ; PODICIPINAE Bonaparte, 1838 ; PODICIPEDIDAE Ogilvie-Grant, 1898.

Recommendations

11. For the reasons set out in the present application it is recommended that the International Commission on Zoological Nomenclature should :—

- (1) use its Plenary Powers to suppress the under-mentioned family-group name for the purposes of the Law of Priority but not for those of the Law of Homonymy : URINATORIDAE (correction of URINATOIRES) Vieillot, 1818 (type genus : *Urinator* Lacépède, 1799) (paragraph 7) ;
- (2) place the under-mentioned family-group names on the *Official List of Family-Group Names in Zoology* :—
 - (a) PODICIPITIDAE (correction of PODICEPINAE) Bonaparte, 1831 (type genus : *Podiceps* Latham, 1787) (paragraph 10) ;
 - (b) GAVIIDAE Coues, 1903 (type genus : *Gavia* Forster, 1788) (paragraph 4) ;

(3) place the under-mentioned family-group names on the *Official Index of Rejected and Invalid Family-Group Names in Zoology* :—

- (a) COLYMBIDAE Shaw, 1824 (type genus : *Colymbus* Linnaeus, 1758, incorrectly determined as the genus typified by *Colymbus immer* Brünnich, 1764 [The Great Northern Diver]) (invalid (i) under *Declaration* 28² because based upon an erroneously determined type genus and (ii) under *Declaration* 20 because the name of the type genus has been suppressed under the Plenary Powers) (paragraphs 2-3) ;
- (b) COLYMBIDAE Coues, 1903 (type genus : *Colymbus* Linnaeus, 1758, correctly determined as the genus typified by *Colymbus cristatus* Linnaeus, 1758 [The Great Crested Grebe]) (invalid under *Declaration* 20 because the name of the type genus has been suppressed under the Plenary Powers) (paragraphs 2-3) ;
- (c) PODICEPINAE Bonaparte, 1831 (type genus : *Podiceps* Latham, 1787) (an Invalid Original Spelling for PODICIPITIDAE) (paragraph 10) ;
- (d) PODICEPSINAE Gray (G.R.), 1840 (type genus : *Podiceps* Latham, 1787) (an Erroneous Subsequent Spelling for PODICIPITIDAE) (paragraph 10) ;
- (e) PODICIPINAE Bonaparte, 1838 (type genus : *Podiceps* Latham, 1787) (an Erroneous Subsequent Spelling for PODICIPITIDAE) (paragraph 10) ;
- (f) PODICIPEDIDAE Ogilvie-Grant, 1898 (type genus : *Podcipes* [Oken], 1839, an Invalid Emendation of *Podiceps* Latham, 1787) (an Erroneous Subsequent Spelling for PODICIPITIDAE) (paragraph 10) ;
- (g) URINATORIDAE (correction of URINATORES) Vieillot, 1818 (type genus : *Urinator* Lacépède, 1799) (first published in correct form as URINATORIDAE, by Baird, Brewer and Ridgeway, 1884) as proposed to be suppressed under the Plenary Powers under (1) above (paragraph 7) ;
- (h) URINATORES Vieillot, 1818 (type genus : *Urinator* Lacépède, 1799) (an Invalid Original Spelling for URINATORIDAE) (paragraph 7) ;

(4) place the under-mentioned specific name on the *Official List of Specific Names in Zoology* :—*arcticus* Linnaeus, 1758, as published in the combination *Colymbus arcticus* (paragraph 8) ;

(5) place the under-mentioned generic name on the *Official Index of Rejected and Invalid Generic Names in Zoology* :—*Podicipes* [Oken], 1839 (an Invalid Emendation of *Podiceps* Latham, 1787) (paragraph 9) ;

² The *Declaration* here referred to is now in the press.

A N N E X E

Report on the question of the correct form of the
family-group name based upon the generic name
"Podiceps" Latham, 1787 (Class Aves)

By L. W. GRENSTED, M.A., D.D.

(Consulting Classical Adviser to the
International Commission on Zoological Nomenclature)

Report dated 24th April 1956

In the case of the generic name *Podiceps* Latham the answer to the question of what is the correct form for the family name depends on the meaning of the name. I can make no sense of it except as derived from *podium* (a projecting balcony) and *caput* (a head). The termination "-ceps" in this sense occurs in several common classical adjectives (*anceps*, *biceps*, *praeceps*, *triceps*). This gives a meaning specially appropriate to the Great Crested Grebe, and is obviously right. These classical forms in "-ceps" all make the genitive "-cipitis" (cf. *caput*) and the family name must therefore be PODICIPITIDAE.

Unfortunately "-ceps" also occurs as a derivative from *capio*, e.g. *anceps*, *-cupis*, *princeps*, *-ipis*. This makes no sense at all as a derivation for the name *Podiceps* (a foot-catcher, buttock-catcher, or balcony-catcher!) and can safely be disregarded, despite the more euphonious family name resulting.

I see in the *Handbook of British Birds* (4 : 85) the queer variant *Podicipes cristatus* (Linnaeus) Saunders, p. 717³. This looks like an attempt to make the word mean "foot-footed"! But actually the classical adjective ending in "-ceps" are based upon pre-classical forms found in Plautus, etc., ending in "-cipes". Thus, the classical *anceps* (two-headed) appears in Plautus as *ancipes*. The stem in either case is "-cipit-", so that Saunders's variant³ does not alter the answer to the main question. In any case it is wholly invalid.

³ As noted in paragraph 9 of the foregoing application, the variant spelling *Podicipes* was first published in 1839 in an anonymous note believed to have been written by Oken.

PROPOSED ADDITION TO THE "OFFICIAL LIST OF GENERIC NAMES IN ZOOLOGY" OF THE GENERIC NAMES "OEOBIA" HÜBNER, [1825], AND "HELLULA" GUENÉE, 1845 (CLASS INSECTA, ORDER LEPIDOPTERA)

By ELWOOD C. ZIMMERMAN

(British Museum (Natural History), London)*

(Commission Reference : Z.N.(S.) 1149)

The purpose of the present application is to ask the International Commission on Zoological Nomenclature to place on the *Official List of Generic Names in Zoology* the names of two genera of Pyralid moths in order thereby to place on record in the most formal way (a) what is the correct spelling of one of the generic names concerned and (b) what is the type species of the genus so named. The problem involved has come to light in the course of writing the volumes on Lepidoptera in the work *Insects of Hawaii*. The facts of this case are set out in the following paragraphs.

2. It will be convenient to deal first with the question of the correct spelling of the older of the two generic names concerned. This name was published by Hübner (J.) in [1825] (*Verz. bekannt. Schmett.* (23) : 362) with the spelling "*Oebia*". Hübner placed this genus in a separate group to which he gave the vernacular and Latin names "*Oeobien*" and "*Oeobiae*" respectively. There is therefore a strong presumption that the spelling "*Oebia*" was a missprint or *lapsus calami* for "*Oeobia*". This presumption is converted into a certainty by the fact that in the index to the *Verzeichniss*—i.e. in the separately paged *Anzeiger* (: 58)—the spelling of this name was corrected to "*Oeobia*". The first point now sought is therefore that the International Commission should rule that the correct spelling for this generic name is "*Oeobia*" and that the spelling "*Oebia*" is an Invalid Original Spelling. In the remainder of the present application this name is cited in the correct spelling "*Oeobia*".

3. The second point with which the present application is concerned is the question of the species to be accepted as the type species of the genus *Oeobia*. Hübner, [1825]. The facts are as follows :—

(a) Hübner [1825] placed in the genus *Oeobia* two nominal species, namely :—

* This research was completed during the tenure of a grant from the United States National Science Foundation.

- (i) *Pyralis numeralis* Hübner, 1796, *Samml. europ. Schmelt.* : pl. Pyr. 14, fig. 89 ;
- (ii) *Pyralis undulalis* Hübner, 1796, *Samml. europ. Schmelt.* : pl. Pyr. 14, fig. 93 [a misspelling of *Phalaena undalis* Fabricius (J.C.), 1781, *Spec. Ins.* 2 : 272 (as is shown by the fact that in the text of the *Pyrales* portion of the *Samml. europ. Schmelt.* (: 19) Hübner used the correct spelling "*undalis*" for this species)].
- (b) Hübner did not designate a type species for the genus *Oeobia* Hübner.
- (c) In 1854 (*Hist. nat. gén. Ins.*, Lép. 8 : 415) Guenée established the monotypical genus *Hellula* with *Phalaena undalis* Fabricius, 1781, as type species by original designation.
- (d) Following Guenée's removal of *Phalaena undalis* Fabricius to the genus *Hellula* Guenée, authors used the name *Oeobia* Hübner for the sole remaining species, namely, *Pyralis numeralis* Hübner, but no one thought it necessary formally to select that species as the type species of *Oeobia*. This was due no doubt to the fact that at that time many zoologists in the absence of an international code of zoological nomenclature applied the "Principle of Elimination" in this case and therefore considered that, as the result of Guenée's action in 1854 in removing *Phalaena undalis* Fabricius to his new genus *Hellula*, the nominal species *Pyralis numeralis* Hübner, as the sole surviving originally included species, was automatically the type species of *Oeobia* Hübner.
- (e) In an *Opinion* (*Opinion* 6) published in 1910 (*Smithson. Publ.* 1938 : 7-9) the International Commission gave a Ruling that, where (i) a genus was established with no more than two included nominal species and (ii) later one of those species was made the type species of a new monotypical genus, the remaining nominal species automatically became the type species of the earlier established genus.
- (f) All the conditions laid down in *Opinion* 6 apply to *Oeobia* Hübner and accordingly under the Ruling given in that *Opinion*, the nominal species *Pyralis numeralis* Hübner automatically became the type species of *Oeobia* Hübner.
- (g) In 1928 (*J. Faculty Agric. Hokkaido imp. Univ.* 22(1) : 246) Shibuya, being apparently unaware of the bearing on this case of the Ruling given in *Opinion* 6, selected *Phalaena undalis* Fabricius as the type species of *Oeobia* Hübner.
- (h) In 1953 (*Copenhagen Decisions zool. Nomencl.* : 72, Decision 135) the Fourteenth International Congress of Zoology, Copenhagen, revoked a decision taken in 1948 by the Thirteenth International Congress

of Zoology, Paris, under which in a clarified form as set out in (d) above the Ruling given in *Opinion 6* had been incorporated into the *Règles*. At the same time, however, the Copenhagen Congress granted protection to cases where the type species of genera had been accepted on the faith of the Ruling given in *Opinion 6*.

4. The greatest confusion would have resulted from the action of Shibuya if that had been accepted, for it would have sunk the well-known name *Hellula* Guenée as a junior objective synonym of *Oeobia* Hübner and would have involved the highly objectionable transfer of the name *Oeobia* to the genus always previously known as *Hellula*. At the time when Shibuya made this unfortunate type selection (1928) the Ruling given in *Opinion 6* was in full force and his action was therefore invalid. It is true that that Ruling is now no longer available for future use but the saving clause enacted by the Copenhagen Congress for the protection of back cases luckily has the effect of preventing the serious confusion which would have followed the acceptance of Shibuya's action. If it were not so, I should have considered that this was a case where in the interests of nomenclatorial stability the Commission should be asked to use its Plenary Powers to set aside Shibuya's type selection and thus to secure that *Pyralis numeralis* Hübner should continue to be recognised as the type species of the genus *Oeobia* Hübner. In order to prevent the possibility of any misunderstanding it is very desirable however, that this matter should be set at rest by the International Commission putting the names *Oeobia* Hübner and *Hellula* Guenée on the *Official List of Generic Names in Zoology*. No family-group-name problem arises in the present case, since both the genera concerned are currently treated as belonging to the family PYRALIDAE.

5. Accordingly, for the reasons set out above, the International Commission on Zoological Nomenclature is now asked :—

- (1) to give a Ruling that the emendation to *Oeobia* of the generic name *Oebia* Hübner, [1825], is a Valid Emendation, having regard to the fact that it was made by the author of the above name in the index (*Anzeiger*) to the same work as that in which the defective spelling *Oebia* was published ;
- (2) to place the under-mentioned generic names on the *Official List of Generic Names in Zoology* :—
 - (a) *Oeobia* (emend. of *Oebia*) Hübner, [1825] (gender : feminine) (type species, by designation through the Ruling given in *Opinion 6*) : *Pyralis numeralis* Hübner, 1796 ;
 - (b) *Hellula* Guenée, 1854 (gender : feminine) (type species, by original designation : *Phalaena undalis* Fabricius (J.C.), 1781) ;

(3) to place the under-mentioned specific names on the *Official List of Specific Names in Zoology*:—

(a) *numeralis* Hübner, 1796, as published in the combination *Pyralis numeralis* (specific name of type species of *Oeobia* Hübner, [1825]);

(b) *undalis* Fabricius (J.C.), 1781, as published in the combination *Phalaena undalis* (specific name of type species of *Hellula* Guenée, 1854);

(4) to place the under-mentioned generic name on the *Official Index of Rejected and Invalid Generic Names in Zoology*:—*Oeobia* Hübner, [1825] (an Invalid Original Spelling for *Oeobia* Hübner);

(5) to place the under-mentioned specific name on the *Official Index of Rejected and Invalid Specific Names in Zoology*:—*undulalis* Hübner, 1796, as published in the combination *Pyralis undulalis* (an Erroneous Subsequent Spelling for *undalis* Fabricius (J.C.), 1781, as published in the combination *Phalaena undalis*).

**SUPPORT FOR THE PROPOSAL MADE BY JOSHUA L. BAILY, JR.,
TO PRESERVE THE GENERIC NAME "TURBINELLA" LAMARCK,
1799, AS THE SACRED CHANK SHELL OF INDIA**

By **CARL L. HUBBS**

(*University of California, U.S.A.*)

(Commission Reference : Z.N.(S.) 383)

(For the proposal in this case see *Bull. zool. Nomencl.* 11 : 330-332)

(Letter dated 10th August 1956)

I hereby express approval of Dr. Joshua L. Baily Jr.'s proposal for the preservation of the long established generic name *Turbinella* and family name TURBINELLIDAE, and for the suppression of the names *Xancus* and XANCIDAE. This proposal seems well substantiated and is quite in line with the spirit and letter of the Copenhagen Colloquim.

SUPPORT FOR GUNNAR HENNINGSMOEN'S PROPOSAL TO DESIGNATE
A TYPE SPECIES IN HARMONY WITH ACCUSTOMED USAGE FOR THE
GENUS "PROPÔTELTURA" BRÜGGER, 1882 AND REQUEST FOR THE
VALIDATION UNDER THE PLENARY POWERS OF THE EMENDATION
TO "PELTURA" OF "PELTOURA" MILNE EDWARDS (H.), 1840 (CLASS
TRILOBITA)

By C. J. STUBBLEFIELD, D.Sc., F.R.S.
(Geological Survey and Museum, London)

(Commission Reference : Z.N.(S.) 1034)

Whilst supporting the case proposed by Cand. Real. G. Henningsmoen¹, I consider that the opportunity ought also to be utilized so that the International Commission on Zoological Nomenclature be requested to exercise its Plenary Powers for the purpose of validating, on grounds of over a hundred years' universal usage, the familiar spelling-emendation of the generic name *Peltoura* Milne Edwards (H.), 1840, to *Peltura* first made by Burmeister (H.), 1843 (*Die Organisation der Trilobiten*, Berlin: 83). It is admittedly not clear whether Burmeister's 1843 emendation was deliberate or a misprint. Corda (A.J.C.), however, in 1847 (in Hawle, I. and Corda, A.J.C., *Prodrom einer Monographie der böhmischen Trilobiten*: 127), unlike Burmeister, recognised the genus as valid and spelt its name in the form *Peltura*; he selected as the type species *Paradoxides* [recte *Entomostracites*] *scarabaeoides* Milne Edwards [recte Wahlenberg, 1821] and gave a new illustration.

2. The genus *Peltoura* was described by Milne Edwards (H.) in 1840 (*Hist. nat. Crustacés* . . . 3 : 344) as being based on two species *Entomostracites scarabaeoides* Wahlenberg 1821 ("Petrificata Telluris Svecanae . . .," *Nova Acta Soc. Sci. upsal.* 8 : 41) and *Peltoura bucklandii* Milne Edwards. The latter species, *P. bucklandii*, was removed from the genus *Peltura* on taxonomic grounds. For the sake of completeness it is desirable however that the specific name *bucklandii* Milne Edwards should now be placed on the *Official List*.

3. It is consistent practice among trilobite workers to refer the generic name *Peltura* to Milne Edwards. Stability in spelling is desirable not only for palaeontological use but also for stratigraphy, for the name *Peltura* is used by stratigraphers for zonal index fossils of the Upper Cambrian in north-west Europe and eastern Canada.

¹ For the application here referred to see Henningsmoen, 1956, *Bull. zool. Nomencl.* 12 : 31—32. *Bull. zool. Nomencl.* Vol. 12, Part 9. September 1956.

4. I accordingly ask that, when it deals with Dr. Henningsmoen's application, the International Commission on Zoological Nomenclature should :—

- (1) use its Plenary Powers to validate the emendation by Burmeister (H.) (1843) to *Peltura* of the generic name *Peltoura* Milne Edwards (H.), 1840 ;
- (2) place the under-mentioned generic name on the *Official List of Generic Names in Zoology* :—

Peltura (emend. under the Plenary Powers under (1) above of *Peltoura*) Milne Edwards (H.), 1840 (gender : feminine) (type species, by selection by Corda (A.J.C.) (1847) : *Entomostracites scarabaeoides* Wahlenberg, 1821) ;

- (3) place the under-mentioned specific names on the *Official List of Specific Names in Zoology* :—

(a) *scarabaeoides* Wahlenberg, 1821, as published in the combination *Entomostracites scarabaeoides* (specific name of type species of *Peltura* (emend. of *Peltoura*) Milne Edwards (H.), 1840) ;

(b) *bucklandii* Milne Edwards (H.), 1840, as published in the combination *Peltura* (emend. of *Peltoura*) *bucklandii* ;

- (4) place the under-mentioned generic name on the *Official Index of Rejected and Invalid Generic Names in Zoology* :—*Peltoura* Milne Edwards (H.), 1840 (an Invalid Original Spelling for *Peltura*, a spelling validated under the Plenary Powers under (1) above).

SUPPORT FOR THE FOLLOWING PROPOSALS IN THE CLASS TRILOBITA BY (a) G. HENNINGSMOEN, TO DESIGNATE A TYPE SPECIES IN HARMONY WITH ACCUSTOMED USAGE FOR THE GENUS "PROTOPELTURA" BRÖGGER, 1882 ; (b) C. POULSEN, TO SECURE THE AVAILABILITY OF THE GENERIC NAMES "OLENUS" DALMAN [1827] AND "PARADOXIDES" BRONGNIART, 1822, AND (c) V. JAANUSSON, TO SUPPRESS THE GENERIC NAME "CRYPTONYMUS" EICHWALD, 1825

By H. B. WHITTINGTON

(Museum of Comparative Zoology at Harvard College, Massachusetts, U.S.A.)

(Commission References : Z.N.(S.) 1034, 623, and 1068)

(For the proposals in these cases see *Bull. zool. Nomencl.* 12 : 31-32, 3-13, and 60-64)

(Letter dated 30th July 1956)

I write to express my support for the following proposals :

Protopeltura, *Olenus* and *Paradoxides*, and *Cryptonymus*.

I believe the actions suggested in each case will be welcome and will promote stability in nomenclature.

ON THE SPECIFIC NAME "MUNDA" KUHL, 1820, AS PUBLISHED
IN THE COMBINATION "PROC[ELLARIA] MUNDA"
(CLASS AVES)

By W. R. P. BOURNE

(Hove, Sussex, England)

(Commission Reference : Z.N.(S.) 704)

(For the application in this case, see *Bull. zool. Nomencl.* 12 : 16-18)

(Letter dated 27th June 1956)

In the *Bulletin of Zoological Nomenclature* 12 : 16-18, Messrs. Alexander, Falla, Fleming, Murphy, and Serventy propose the suppression of the specific name *Proc[ellaria] munda* Kuhl, 1820. I am afraid that I have not been able to examine their proposal carefully, but I received the impression that these authors did not make it clear whether they wished to suppress the name on the grounds of identification or expediency. I submit that there can be no doubt about the identification ; if they wish to suppress this name (which has clear priority for the species) on the grounds of expediency I should like to support them. It seems desirable that a ruling should be obtained on the case with either alternative.

Proc[ellaria] munda Kuhl was described from the unpublished Parkinson drawing no. 24 among the Banksian material at the British Museum (Natural History). This is a scale pencil drawing made in the field during Cook's first expedition with notes of the colours of the soft parts and the date and place of origin which were quoted by Kuhl. The general appearance and dimensions of the drawing agree with either of the two small shearwaters *Proc[ellaria] assimilis* Gould or *Proc[ellaria] therminieri* Lesson, but the colours of the soft parts are characteristic of *Proc[ellaria] assimilis*. The drawing shows very prominent edges to all the feathers of the upper parts which appear to be the white borders characteristic of the subantarctic race of *Proc[ellaria] assimilis* variously known by the names *Puffinus elegans* Giglioli and Salvadori, *P. a. munda* Murphy or *P. a. kuhliana* Mathews. All the other races of *Proc[ellaria] assimilis* are uniformly dark above. (Murphy, *Amer. Mus. Novit.* 1927 ; Fleming & Serventy, *Emu* 43 : 113-125). The measurements of different specimens which I have examined are as follows :—

	Culmen (mm.)	Wing (mm.)	Tarsus (mm.)	Mid Toe (mm.)
Parkinson drawing 24 : 48 27S 93E (Type of <i>Proc. munda</i> 1820)	26	180+	39	48
Immature type of <i>Puffinus elegans</i>	27	188	40	48
8 <i>Puffinus assimilis</i> from Tristan (S. Atlantic)	25-27	183-195	39-41	42-48
1 <i>Puffinus assimilis</i> from Rapa Id. (S. Pacific)	25	196	40	43

If there is any further doubt about the identity of this drawing it should be resolved by the associated description of the same bird in the Solander MSS. Z4, p. 115 (first published by Mathews, 1912, *The Birds of Australia*, vol. 2) which states that the bird was "supra cinereo-nigricans, subta nivea" with the upper parts "calybeato-nigricantia", a description which could only apply to the subantarctic form of *Procellaria assimilis* Gould.

Therefore there does not appear to be any doubt about the precise identity of *Procellaria munda* Kuhl, and the name has clear priority for the species *Procellaria assimilis* Gould. It can only be discarded on the grounds of expediency. Stresemann (*Ibis* 91 : 244; *Auk* 67 : 66) has already argued that many of the old names for birds collected on Cook's expeditions which have only recently been identified should be suppressed, on the grounds of expediency. The same arguments apply to *Procellaria munda* Kuhl, but if this case is admitted there are a very large number of other names which should be treated in the same way.

SUPPORT FOR THE PROPOSALS ON THE FOLLOWING NAMES IN THE CLASS TRILOBITA:—"PARADOXIDES" BRONGNIART, 1822 (C. POULSEN); "ASAPHUS" BRONGNIART, 1822 (V. JAANUSSON); "TRINUCLEUS" MURCHISON, 1839 (C. J. STUBBLEFIELD & H. B. WHITTINGTON); "CRYPTONYMUS" EICHWALD, 1825 (V. JAANUSSON)

By RUDOLF & EMMA RICHTER

(Forschungs-Institutes und Natur-Museum Senckenberg, Frankfurt, Germany)

(Commission References : Z.N.(S.) 623, 636, 926, 1068)

(For the proposals in these cases see *Bull. zool. Nomencl.* 12 : 3-13, 90-96, 49-54, 60-64)

(Letter dated 30th July 1956)

Für den Fall, dass es den betreffenden Anträgen helfen kann, möchten wir Ihnen mitteilen, dass wir sie im Interesse der Stabilität der Nomenklatur nachdrücklich unterstützen.

Es handelt sich um folgende Anträge: *Paradoxides*, *Asaphus*, *Trinucleus* and *Cryptonymus*.

(*Cryptonymus*) Wir Schliessen uns diesem Antrag im Sinne von Dr. Stubblefield an, wonach der Name *Cryptonymus* unterdrückt werden soll hinsichtlich der Priorität, nicht aber hinsichtlich der Homonymie.

**SUPPORT FOR PROFESSOR DR. CHRISTIAN POULSEN'S PROPOSAL
FOR THE VALIDATION OF THE GENERIC NAMES "SAO"
BARRANDE, 1846 AND "ELLIPSOCEPHALUS" ZENKER, 1833
(CLASS TRILOBITA)**

By **C. J. STUBBLEFIELD**
(*Geological Survey and Museum, London*)
(Commission Reference : Z.N.(S.) 666)

(For the proposal in this case see *Bull. zool. Nomencl.* 12 : 131-135)

(Letter dated 17th August 1956)

In the interests of nomenclatorial stability I support the proposal that the well-known generic names *Sao* Barrande, 1846, and *Ellipsocephalus* Zenker, 1833, be validated in accordance with current usage.

**SUPPORT FOR PROFESSOR ALEXANDER PETRUNKEVITCH'S
PROPOSAL FOR THE VALIDATION OF THE GENERIC NAME
"PALAEOPHONUS" LINDSTRÖM AND THORELL, 1884 (CLASS
ARACHNIDA)**

By **C. J. STUBBLEFIELD**
(*Geological Survey and Museum, London*)
(Commission Reference : Z.N.(S.) 1010)

(For the proposal in this case see *Bull. zool. Nomencl.* 12 : 153-155)

(Letter dated 17th August 1956)

I support the proposal to validate the generally accepted spelling of the generic name *Palaeophonus* Lindström and Thorell, 1884, in the interests of stability of nomenclatorial usage.

**SUPPORT FOR THE PROPOSAL BY C. POULSEN ON
"PARADOXIDES" BRONGNIART, 1822
(CLASS TRILOBITA)**

(a) By **B. F. HOWELL**
(*Princeton University, New Jersey, U.S.A.*)
(Commission Reference : Z.N.(S.) 623)

(For the proposal in this case see *Bull. zool. Nomencl.* 12 : 3-13)

(Letter dated 7th August 1956)

I am heartily in favor of the action which Dr. Poulsen recommends. I hope that the Commission will act favorably on his proposal.

(b) By **C. J. STUBBLEFIELD**
(*Geological Survey and Museum, London*)
(Letter dated 17th August 1956)

I support the proposal that the two well-known generic names *Olenus* Dalman [1827] and *Paradoxides* Brongniart, 1822, should be validated so that they may continue to be used in the sense that they are customarily employed. To discard one or the other would cause immense confusion.

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THE BULLETIN OF ZOOLOGICAL NOMENCLATURE

The Official Organ of
THE INTERNATIONAL COMMISSION ON
ZOOLOGICAL NOMENCLATURE

Edited by

FRANCIS HEMMING, C.M.G., C.B.E.

Secretary to the International Commission on Zoological Nomenclature

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INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

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(12th August 1953)

Vice-President: Senhor Dr. Afranio do AMARAL (*Sao Paulo, Brazil*) (12th August 1953)

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B. The Members of the Commission

(Arranged in order of precedence by reference to date of election or of most recent re-election, as prescribed by the International Congress of Zoology)

Professor H. BOSCHMA (*Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands*)
(1st January 1947)

Senor Dr. Angel CARRERA (*La Plata, Argentina*) (27th July 1948)

Mr. Francis HEMMING (*London, England*) (27th July 1948) (*Secretary*)

Dr. Henning LEMCHE (*Universitets Zoologiske Museum, Copenhagen, Denmark*) (27th July 1948)

Professor Teiso ESAKI (*Kyushu University, Fukuoka, Japan*) (17th April 1950)

Professor Pierre BONNET (*Université de Toulouse, France*) (9th June 1950)

Mr. Norman Denbigh RILEY (*British Museum (Natural History), London*) (9th June 1950)

Professor Dr. Tadeusz JACZEWSKI (*Institute of Zoology, Polish Academy of Sciences, Warsaw, Poland*) (15th June 1950)

Professor Dr. Robert MERTENS (*Natur Museum u. Forschungs-Institut Senckenberg, Frankfurt a. M., Germany*) (5th July 1950)

Professor Dr. Erich Martin HERING (*Zoologisches Museum der Humboldt-Universität zu Berlin, Germany*) (5th July 1950)

Senhor Dr. Afranio do AMARAL (*S. Paulo, Brazil*) (12th August 1953) (*Vice-President*)

Professor J. R. DYMOND (*University of Toronto, Toronto, Canada*) (12th August 1953)

Professor J. Chester BRADLEY (*Cornell University, Ithaca, N.Y., U.S.A.*) (12th August 1953)
(*President*)

Professor Harold E. VOKES (*University of Tulane, Department of Geology, New Orleans, Louisiana, U.S.A.*) (12th August 1953)

Professor Béla HANKÓ (*Mezőgazdasági Múzeum, Budapest, Hungary*) (12th August 1953)

Dr. Norman R. STOLL (*Rockefeller Institute for Medical Research, New York, N.Y., U.S.A.*) (12th August 1953)

Mr. P. C. SYLVESTER-BRADLEY (*Sheffield University, Sheffield, England*) (12th August 1953)

Dr. L. B. HOLTHUIS (*Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands*) (12th August 1953)

Dr. K. H. L. KEY (*Commonwealth Scientific and Industrial Research Organisation, Canberra, A.C.T., Australia*) (15th October 1954)

Dr. Alden H. MILLER (*Museum of Vertebrate Zoology, University of California, Berkeley, California, U.S.A.*) (29th October 1954)

Doc. Dr. Ferdinand PRANTL (*Národní Museum v Praze, Prague, Czechoslovakia*) (30th October 1954)

Professor Dr. Wilhelm KÜHNELT (*Zoologisches Institut der Universität, Vienna, Austria*) (6th November 1954)

Professor F. S. BODENHEIMER (*The Hebrew University, Jerusalem, Israel*) (11th November 1954)

Professor Ernst MAYR (*Museum of Comparative Zoology at Harvard College, Cambridge, Massachusetts, U.S.A.*) (4th December 1954)

Professor Enrico TORTONESE (*Museo di Storia Naturale "G. Doria," Genova, Italy*) (16th December 1954)

BULLETIN OF ZOOLOGICAL NOMENCLATURE

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31st October 1956

NOTICES PRESCRIBED BY THE INTERNATIONAL CONGRESS OF ZOOLOGY

The following notices are given in pursuance of decisions taken, on the recommendation of the International Commission on Zoological Nomenclature (see 1950, *Bull. zool. Nomencl.* 4 : 51-56, 57-59), by the Thirteenth International Congress of Zoology, Paris, July 1948 (see 1950, *Bull. zool. Nomencl.* 5 : 5-13, 131).

(a) Date of commencement by the International Commission on Zoological Nomenclature of Voting on applications published in the " Bulletin of Zoological Nomenclature "

NOTICE is hereby given that normally the International Commission will start to vote upon applications published in the *Bulletin of Zoological Nomenclature* on the expiry of a period of six calendar months from the date of publication in the *Bulletin* of the applications in question. Any specialist who may desire to comment upon any of the applications published in the present Part (Vol. 12, Part 10) of the *Bulletin* is accordingly invited to do so in writing, and in duplicate, to the Secretary to the Commission, as quickly as possible and in any case, in sufficient time to enable the communication in question to reach the Secretariat of the Commission before the expiry of the six-month period referred to above.

(b) Notice of the possible use by the International Commission on Zoological Nomenclature of its Plenary Powers in certain cases

NOTICE is hereby given that the possible use by the International Commission on Zoological Nomenclature of its Plenary Powers is involved in applications published in the present Part of the *Bulletin of Zoological Nomenclature* in relation to the following cases :—

- (1) *Encrinurus* Emmerich, 1844, and *Odontochile* Hawle & Corda, 1847, designation of a type species for, in harmony with accustomed usage ; *punctatus* Wahlenberg, 1821 (*Entomostracites*), validation of (Class Trilobita) (Z.N.(S.) 1059) ;
- (2) *Cupido* Schrank, 1801, designation of a type species for, in harmony with accustomed usage (Class Insecta, Order Lepidoptera) (Z.N.(S.) 1138) ;

Notices prescribed by the International Congress of Zoology (*continued*)

- (3) *jurtina* Linnaeus, 1758 (*Papilio*), grant of precedence to, over *janira* Linnaeus, 1758 (*Papilio*); EPINEPHELIDI Tutt, 1896, suppression of (Class Insecta, Order Lepidoptera) (Z.N.(S.) 1142);
- (4) *venulosa* Laurentus, 1768 (*Hyla*), determination of (Class Amphibia) (Z.N.(S.) 771).

2. Attention is also drawn to the proposed adoption of a *Declaration* regarding the method to be followed in determining the relative precedence to be accorded to two or more names for family-group taxa published in the same book and on the same date (Z.N.(S.) 1141).

3. Comments received in sufficient time will be published in the *Bulletin*: other comments, provided that they are received within the prescribed period of six calendar months from the date of publication of the present Part will be laid before the International Commission on Zoological Nomenclature at the time of commencement of voting on the application concerned.

2. In accordance with the procedure agreed upon the Session held by the International Commission on Zoological Nomenclature in Paris in 1948 (see 1950, *Bull. zool. Nomencl.* 4 : 56), corresponding Notices have been sent to the serial publications *Nature* and *Science*.

FRANCIS HEMMING

*Secretary to the International Commission on
Zoological Nomenclature*

28 Park Village East, Regent's Park,
LONDON, N.W.1, England.

31st October, 1956.

PROPOSED USE OF THE PLENARY POWERS (a) TO DESIGNATE TYPE SPECIES IN HARMONY WITH ACCUSTOMED USAGE FOR THE GENERA " ENCRINURUS " EMMRICH, 1844, AND " ODONTOCHILE " HAWLE & CORDA, 1847, AND (b) TO VALIDATE THE SPECIFIC NAME " PUNCTATUS " WAHLENBERG, 1821, AS PUBLISHED IN THE COMBINATION " ENTOMOSTRACITES PUNCTATUS " (CLASS TRILOBITA)

By

RONALD PEARSON TRIPP

(Glasgow)

and

WALTER FREDERICK WHITTARD

(Bristol)

Plate 3

(Commission Reference : Z.N.(S.) 1059)

The object of the present application is to ask the International Commission on Zoological Nomenclature to use its Plenary Powers to designate *Entomostracites punctatus* Wahlenberg, 1821, as represented by the pygidium, as the type species of the genus *Encrinurus* Emmrich, 1844 (Class Trilobita), and to suppress the name *Trilobus punctatus* Brünnich, 1781, for all purposes. This application is made in order to avoid confusion in the nomenclature of this widely occurring Ordovician and Silurian genus, and also to obtain a ruling for incorporation in the *Treatise on Invertebrate Paleontology*.

2. M. T. Brünnich in 1781 (: 394) described, but did not figure, a trilobite as "*Trilobus punctatus*, annulis corporis punctis per series transversim notatis".

3. G. Wahlenberg in 1821 (: 32, pl. ii, figs. 1, 1*) described and figured a cranium and a pygidium as *Entomostracites punctatus* quoting Brünnich as the author. The cranium illustrated as fig. 1 represents a calymenid; the pygidium illustrated as fig. 1* is of the form now always accepted as characterising *Encrinurus*.

4. H. F. Emmrich in 1844 (: 16) founded the genus *Encrinurus* upon *Entomostracites punctatus* Wahlenberg, 1821, the only species which he referred to the genus. Both the derivation of the name *Encrinurus* and the diagnosis of the genus indicate that Emmrich was impressed chiefly by the characters of the pygidium.

5. W. F. Whittard in 1938 (: 122) recorded that Professor Christian Poulsen (*Copenhagen*) and he had examined Brünnich's two type pygidia, and that probably *Trilobus punctatus* Brünnich, 1781 and *Dalmanites* [sic] *hausmanni* (Brongniart, 1822) are synonymous. Whittard stated his opinion that the pygidium figured by Wahlenberg automatically became the type specimen of *Encrinurus punctatus*, overlooking the fact that Wahlenberg had quoted Brünnich as the author of the species. If Whittard and Poulsen's opinions concerning *Trilobus punctatus* Brünnich, 1781, are correct and if the normal provisions of the rules were applied in this case there would be immense confusion for the name *Encrinurus*, the type genus of a widely distributed family, would be transferred to a species belonging to an entirely different family of trilobites, and the species named *Asaphus hausmanni* Brongniart would need to be referred to the synonymy of *Encrinurus punctatus* Brünnich.

6. In order to avoid the necessity for this change in current nomenclature, we recommend that the combination *Entomostracites punctatus*, as published by Wahlenberg, 1821, is to be treated as a combination then published for the first time. In anticipation of the approval of the Commission to this application, we hereby select the pygidium which Wahlenberg, 1821, figured as pl. ii, fig. 1* as the lectotype. This specimen is now preserved in the museum of the Paleontological Institute of Uppsala under the number 1200; it is from Gotland but the exact locality is unknown. A label has been affixed to the specimen stating that it has been selected by the present authors as the lectotype of *Entomostracites punctatus* Wahlenberg, 1821, and that the International Commission on Zoological Nomenclature has been asked to validate this selection under its Plenary Powers. Annexed to the present application is a plate (Pl. 3) on which are given photographs of the lateral view (fig. 1) and of the dorsal view (fig. 2) of the pygidium of the specimen here selected as the lectotype.

7. R. and E. Richter, 1931 (: 140) considered *Asaphus hausmanni* Brongniart, 1822, to be the type species of the genus *Odontochile* Hawle & Corda, 1847 (: 208), and this opinion has been followed by later authors. However, Vogdes, 1925, had earlier selected *Odontochile applanatus* Hawle and Corda, 1847, as the type species. So far as is known Barrande, 1852 (: 538), was correct in regarding these two nominal species as subjectively identical with one another.

8. Family-Group Name. The genus *Encrinurus* Emmrich is the type genus of the family ENCRINURIDAE Angelin, 1854 (: 88). This family name should be placed on the *Official List of Family-Group Names in Zoology*. There is no family-group name based on the genus *Odontochile*.

Recommendations

9. In the light of the considerations advanced in the present application, the International Commission on Zoological Nomenclature is asked:—

(1) to use its Plenary Powers :—

- (a) to suppress the under-mentioned name and the under-mentioned usage of a name for the purposes both of the Law of Priority and of the Law of Homonymy :—

(i) *punctatus* Brünnich, 1781, as published in the combination *Trilobus punctatus* ;

(ii) *punctatus*, all usages of, in combination with the generic name *Trilobus* Brünnich, 1781, subsequent to Brünnich, 1781, and prior to the publication by Wahlenberg in 1821 of the above specific name in combination with the generic name *Entomostracites* Wahlenberg, 1821 ;

- (b) to direct that the binomen *Entomostracites punctatus* as published by Wahlenberg in 1821 be treated as being a scientific name (binominal combination) then published for the first time and to validate the specific name *punctatus* Wahlenberg, 1821, so published ;

- (c) to direct that the specific name *punctatus* Wahlenberg, 1821, as published in the combination *Entomostracites punctatus*, be interpreted by reference to the lectotype selected therefor by Tripp and Whittard in paragraph 6 of, and illustrated in plate 3 annexed to, the present application ;

- (d) under the procedure prescribed by the Thirteenth International Congress of Zoology, Paris, 1948, for determining the type species of a genus based upon a misidentified type genus, (i) to set aside all designations or selections of a type species for the genus *Encrinurus* Emmrich, 1844 (Class Trilobita) made prior to the Ruling now asked for, and (ii), having done so, to designate as the type species of the above genus the nominal species *Entomostracites punctatus* Wahlenberg, 1821, as validated under the Plenary Powers under (b) above and as interpreted under the same Powers in (c) above ;

- (e) to set aside all type selections for the genus *Odontochile* Hawle & Corda, 1847 (Class Trilobita) made prior to the Ruling now asked for, and, having done so, to designate as the type species of the foregoing genus, the nominal species *Asaphus hausmanni* Brongniart, 1822 ;

(2) to place the under-mentioned generic names on the *Official List of Generic Names in Zoology* :—

- (a) *Encrinurus* Emmrich, 1844 (gender : masculine) (type species, by designation under the Plenary Powers under (1)(d) above :

Entomostracites punctatus Wahlenberg, 1821, as validated and interpreted under the foregoing Powers under (1)(b) and (1)(c) above respectively);

- (b) *Odontochile* Hawle & Corda, 1847 (gender : masculine) (type species, by designation under the Plenary Powers under (1)(e) above : *Asaphus hausmanni* Brongniart, 1822);

(3) to place the under-mentioned specific names on the *Official List of Specific Names in Zoology* :—

- (a) *punctatus* Wahlenberg, 1821, as published in the combination *Entomostracites punctatus* and as validated and interpreted under the Plenary Powers under (1)(b) and (1)(c) above respectively (specific name of type species of *Encrinurus* Emmrich, 1844);

- (b) *hausmanni* Brongniart, 1822, as published in the combination *Asaphus hausmanni* (specific name of type species of *Odontochile* Hawle & Corda, 1847);

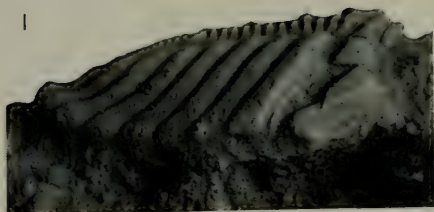
(4) to place on the *Official Index of Rejected and Invalid Specific Names in Zoology* the name and the usages of a name specified in (1)(a) above, as there suppressed under the Plenary Powers;

(5) to place the under-mentioned family-group name on the *Official List of Family-Group Names in Zoology* : ENCRINURIDAE Angelin, 1854 (type genus : *Encrinurus* Emmrich, 1844).

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2



For explanation see opposite page.

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- Wahlenberg, G., 1821, "Petrificata telluris Svecanae", *Nova Acta Soc. Sci. Upsal.*, (5) **8**, Upsaliae
- Whittard, W. F., 1938, "The Upper Valentian Trilobite Fauna of Shropshire", *Ann. Mag. nat. Hist.* (11) **1** : 85, London

Explanation to Plate 3

"*Entomostracites punctatus*" Wahlenberg, 1821

Illustrations of the lectotype selected by Tripp (R.P.) and Whittard (W.F.) in paragraph 6 of the present application (specimen figured by Wahlenberg, 1821, Pl. II, fig. 1.)

Fig. 1 Lateral view of the pygidium

Fig. 2 Dorsal view of the pygidium

The photographs are four times the natural size. They have not been retouched.

For these photographs the authors are indebted to Mr. N. Hjorth and Dr. V. Jaanusson, Palaeontological Institute of Uppsala University.

**PROPOSED ADOPTION OF A " DECLARATION " REGARDING THE
METHOD TO BE FOLLOWED IN DETERMINING THE RELATIVE
PRECEDENCE TO BE ACCORDED TO TWO OR MORE NAMES
FOR FAMILY-GROUP TAXA PUBLISHED IN THE SAME BOOK
AND ON THE SAME DATE**

By **FRANCIS HEMMING**, C.M.G., C.B.E.

(*Secretary to the International Commission on Zoological Nomenclature*)

(**Commission Reference : Z.N.(S.) 1141**)

The purpose of the present application is to ask the International Commission on Zoological Nomenclature to adopt a *Declaration* regarding the method to be followed in determining the relative precedence to be accorded to two or more names for family-group taxa published in the same book and on the same date.

2. The foregoing problem has arisen in connection with the precedence to be accorded to the names for two tribes, EVERIDI and CUPIDINIDI (correction of CUPIDIDI) in the family LYCAENIDAE (Class Insecta, Order Lepidoptera) on which an application (Z.N.(S.) 1138) is being submitted to the Commission for the purpose of securing the continued use of the name *Cupido* Schrank, 1801, in its accustomed sense¹. Both the foregoing family-group names were published in [1907] in the same Part of Volume 2 of Tutt's *Natural History of the British Butterflies* (: 327). The name EVERIDI Tutt is in general use for the taxon having *Everes* Hübner, [1819], as type genus and by some authors (e.g. Lorković) this family-group taxon has been elevated to subfamily rank. The genus *Cupido* Schrank, 1801, is regarded by some authors as typifying a distinct family-group taxon, but by others as being properly placed in the same family-group taxon as *Everes* Hübner. The question now to be considered is what is the family-group name which should be used by those specialists who consider that the genera *Everes* Hübner and *Cupido* Schrank should be separated from other genera at the family-group level but should themselves be placed in the same family-group taxon. Should the name EVERIDI (or EVERINAE) be used for this taxon or should the name CUPIDINIDI (or CUPIDININAE) be used for this taxon ?

3. The *Règles*, as adopted by the Fifth International Congress of Zoology, Berlin, 1901, provided in Article 28 that the relative precedence to be accorded to generic names and specific names published in the same book and on the same date was to be determined in accordance with the "First Reviser

¹ For the application here referred to see pp. 267-274 of the present Part.
Bull. zool. Nomencl. Vol. 12, Part 10. October 1956.

Principle". In 1948 the Thirteenth International Congress of Zoology, Paris, substituted the "Page and Line Precedence Principle" as that which should be applied in such cases (1950, *Bull. zool. Nomencl.* 4 : 330-331), but this change did not secure general approval and in 1953 the Fourteenth International Congress of Zoology reversed the decision of the Paris Congress in this matter and re-instated the "First Reviser Principle" (1953, *Copenhagen Decisions zool. Nomencl.* : 66-67, Decision 123). At the same time the Copenhagen Congress inserted in the *Règles* a provision defining the expression "First Reviser" (*ibid.* : 67, Decision 124), thus largely meeting the point of view of those taxonomists who had till then disliked the "First Reviser Principle" because of the practical difficulties involved in its application through the lack of guidance as to what action an author is required to take in order to qualify himself for recognition as a "First Reviser".

4. The possibility that the problem discussed above might arise not only in connection with generic and specific names but also in connection with names published for family-group taxa was overlooked when at Copenhagen in 1953 the provisions in the *Règles* relating to family-group names were revised by the Fourteenth International Congress of Zoology. There is therefore at present no provision in the *Règles* for determining the relative precedence to be accorded to names for family-group taxa published in the same book or paper and on the same date. It is desirable that this omission should now be rectified as quickly as possible, for it is likely that the foregoing problem will be found to arise fairly frequently in view of the fact that, although in many cases family-group names were introduced into the literature singly, there are numerous works containing sections devoted entirely to questions of supra-generic classification in which considerable numbers of new nominal family-group taxa were introduced in close proximity to one another and where in consequence the problem discussed above has already arisen.

5. In view of the decision by the Copenhagen Congress that the best way of dealing with this problem when it arises in connection with the names of genera and species is to apply the "First Reviser Principle", it would be both illogical and undesirable to apply any other principle for dealing with this problem at the family-group-name level. I therefore recommend that this principle be adopted, its application being made subject to conditions similar to those prescribed by the Copenhagen Congress in relation to the determination of the relative precedence to be accorded to generic or specific names when published in the same book or paper and on the same date.

6. I accordingly submit for the consideration of the International Commission the proposal that it adopt a *Declaration* in the following terms :—

DRAFT DECLARATION : (1) The relative precedence to be accorded to any two names for nominal family-group taxa published in the same work and on the same date shall be determined in accordance with the "First Reviser

Principle", that is, when two such taxa are united on taxonomic grounds, the name to be used for the combined taxon so recognised is to be whichever of the previously published family-group names is selected for use as such by a "First Reviser" ("selection by a First Reviser").

(2) For the purposes of (1) above the expression "selection by a First Reviser" is to be rigidly construed and such a selection is to be deemed to have been effected only when an author, after citing two or more family-group names published in the same work and on the same date, clearly indicates, by whatever method, (a) that he is of the opinion that the respective type genera of the nominal family-group taxa concerned are referable to a single family-group taxon, and (b) that he is selecting one of the family-group names concerned, to the exclusion of the other name or names, to be the name for the combined family-group taxon so recognised.

**SUPPORT FOR DR. HOLTHUIS' PROPOSAL RELATING TO THE
GENERIC NAME "PANULIRUS" WHITE, 1847 (CLASS CRUSTACEA,
ORDER DECAPODA)**

By **TEISO ESAKI**

(*Kyushu University, Fukuoka, Japan*)

(Commission Reference : Z.N.(S.) 1030)

(For the proposal in this case see *Bull. zool. Nomencl.* 12 : 55—59)

(Letter received 21st August 1956)

I would like to support Dr. Holthuis' application for preserving *Panulirus* White, 1847, by suppressing its senior subjective synonym *Phyllosoma* Leach, 1818. The species of *Panulirus* are important as marine products in Japan, and its type species, *Panulirus japonicus* (von Siebold, 1824), is well known and one of the most appreciated delicacies in this country. For those species the generic name *Panulirus* has been most extensively used in both scientific and economic papers for many years. The name *Phyllosoma* is also popular in textbooks of zoology and fisheries as denoting a special stage of development, but is never used as a generic name. Therefore the preservation of the name *Panulirus* as the generic name of the Japanese Spiny Lobster and allied species is highly desirable in the interest of stability.

PROPOSED USE OF THE PLENARY POWERS TO DESIGNATE A
TYPE SPECIES IN HARMONY WITH CURRENT USAGE FOR THE
GENUS "CUPIDO" SCHRANK, 1801 (CLASS INSECTA, ORDER
LEPIDOPTERA) AND MATTERS INCIDENTAL THERETO

By FRANCIS HEMMING, C.M.G., C.B.E.

(Secretary to the International Commission on Zoological Nomenclature)

(Commission Reference : Z.N.(S.) 1138)

The object of the present application is to ask the International Commission on Zoological Nomenclature to use its Plenary Powers to designate a type species in harmony with current usage for the genus *Cupido* Schrank, 1801 (Class Insecta, Order Lepidoptera) and thus to avoid the serious and extensive name-changing and consequent confusion which would be involved if the normal provisions of the *Règles* were to be applied in the present case. The facts of this case are set out in the following paragraphs.

2. The nominal genus *Cupido* Schrank, 1801 (*Fauna boica* 2(1) : 153, 206-220) was established for the group of butterflies which Schrank called the "Schildfalter". No nominal species were cited for this genus in the generic diagnosis given on page 153, but later in the descriptive text (: 206-221) Schrank placed in it twenty-four nominal species. These comprised the whole of the species of what is now known as the family LYCAENIDAE known to Schrank as occurring in the area covered by his book. As was inevitable in a book published at this early date Schrank did not designate a type species for this genus. Among the nominal species placed by Schrank in his genus the following must be noted :—*Papilio virgaureae* Linnaeus, 1758 (*Syst. Nat.* (ed. 10) 1 : 484) (Schrank's species No. 1356) (: 206) ; *Papilio arion* Linnaeus, 1758 (*Syst. Nat.* (ed. 10) 1 : 483) (Schrank's species No. 1361) (: 209) ; *Cupido puer* Schrank nov. sp. (Schrank's species No. 1374) (: 215).

3. As will be seen later (paragraph 4 below) the name *Cupido puer* Schrank enters into consideration in connection with the determination of the type species of the genus *Cupido* Schrank. It is necessary therefore at this stage to pause for a moment to consider the question of the interpretation of this nominal species. This has long been recognised as being a composite species as established by Schrank. As in the case of other species which were—or which he thought were—sexually dimorphic, Schrank gave a separate description for each sex, that for what he considered to be the male being so dis-

tinguished by the addition of the word "Er" in italic type and in parentheses at the end of the diagnosis, that of what he considered to be the female being similarly distinguished by the addition of the word "Sie". These diagnoses were followed by a short synonymy. This included the names of three previously established nominal species, namely:—(a) *Papilio minimus* Fuessly (J.C.), 1775 (*Schweiz. Ins.* : 31); (b) *Papilio tiresias* Rottensburg, 1775 (*Der Naturforscher* 6 : 23) (the reference cited being to Schneider's (1787) use of this name); (c) *Papilio pseudolus* Bergsträsser, [1779] (*Ik. Pap.* 1 : 5, pl. 5, fig. 5, 6♀; *id.*, [1779], *Nom. Ins.* 3 : 5, pl. 50, fig. 5, 6♀) (the reference cited being to Borkhausen's (1788) usage of this name). These references were followed by extended descriptions of what Schrank believed to be two varieties (*Spielarten*) found in each sex. There is agreement that two species were confused by Schrank under the name *Cupido puer*, these species being those known in England as the Short-tailed Blue and the Small Blue respectively. The description given by Schrank for the male ("Er") and the reference to the nominal species *Papilio tiresias* Rottensburg apply to the Short-tailed Blue, the oldest available name for which, therefore and the valid name of which, is *Papilio argiades* Pallas, 1771 (*Reise versch. Prov. Russ. Reichs* 1 : 472). The description given by Schrank for the female ("Sie") and the references to the nominal species *Papilio minimus* Fuessly, 1775, and *Papilio pseudolus* Bergsträsser, [1779], apply to the Small Blue, the oldest available name for which, and therefore the valid name of which, is the first of those cited by Schrank, namely, *Papilio minimus* Fuessly, 1775.

4. The components of the nominal species *Cupido puer* Schrank, 1801, have often been discussed in connection with the determination of the type species of the genus *Cupido* Schrank, 1801, the first author to do so in detail being Kirby (W.F.) in 1870 (*J. linn. Soc. Lond. (Zool.)* 10 : 499). Hitherto, however, authors discussing this matter, have always assumed that the composite character of this nominal species was such that it was not possible to secure for it a strictly determinate content. This is due no doubt to the fact that the discussions on this case took place before 1948 and therefore before the clarification and amplification of Article 31, including the recognition and definition of the concept of "lectotype", by the Thirteenth International Congress of Zoology, Paris, and the further clarification carried out in 1953 by the Fourteenth International Congress of Zoology, Copenhagen (1953, *Copenhagen Decisions zool. Nomencl.* : 72-78, Decisions 136-150). Equipped with the resources so provided, it is at last possible to determine the interpretation of the nominal species *Cupido puer* Schrank, 1801, and this I now do by selecting as the lectotype of that nominal species the specimen on which in 1775 Fuessly based his description of *Papilio minimus* in the work cited by Schrank. As the result of this lectotype selection the specific name *puer* Schrank, 1801, becomes a junior objective synonym of *minimus* Fuessly, 1775, and finally disappears in synonymy.

5. The first author to attempt to select a type species for the genus *Cupido* Schrank was Kirby who in 1870 in the paper cited in paragraph 4 above,

after explaining the composite character of Schrank's nominal species *Cupido puer*, stated that : " The true type of *Cupido* appears to be *alsus*". At that time the name *Cupido* Schrank was not in use and Kirby's action was no doubt prompted by a decision on his part to introduce this generic name in his then forthcoming *Syn. Cat. diurn. Lep.* for the enormous group previously known by the name *Lycaena* Fabricius, 1807, a name which he sank as a junior synonym of *Cupido* Schrank (: 345-346). This group comprised almost all the then known species of what is now regarded as the subfamily PLEBEJINAE and many others, a total of 325 nominal species. In 1875 (*Proc. amer. Acad. Arts Sci.*, Boston 10 : 149, 293) Scudder rejected Kirby's action of 1870 and selected *Papilio arion* Linnaeus, 1758, to be the type species of *Cupido* Schrank. In 1896 (*in* Allen's *Nat. Libr.*, Hand. Lepid. 1 Butt. 2 : 85) Kirby reverted to this subject ; he still took the view that one of the components of Schrank's *Cupido puer* should be regarded as the type species of the genus *Cupido* Schrank, but on this occasion, contrary to what he had said in 1870, he stated that the type species was the species which Schrank had regarded as being the male of *Cupido puer*, namely, the Short-tailed Blue, *Papilio argiades* Pallas, 1771. This argument was contested in [1909] (*Nat. Hist. Brit. Butts.* 3 : 101-104) by Tutt who accepted *Papilio minimus* Fuessly, 1775, as the type species of *Cupido* Schrank. The generic analyses of the Palaearctic butterflies on modern lines was started by the late T. A. Chapman, whose results were published in Tutt's work. Chapman's prestige and the soundness of his methods commanded immediate attention and for the period of nearly fifty years which has since elapsed there has been virtual unanimity in the usage of *Cupido* Schrank for the group represented by *Papilio minimus* Fuessly, 1775.

6. I have recently begun a re-survey of the generic nomenclature of the butterflies in the light of the decisions on the *Règles* taken in 1948 and 1953 respectively by the Thirteenth and Fourteenth International Congresses of Zoology (Paris and Copenhagen), the purpose of this examination being to ascertain whether and, if so, in what way it was necessary to modify previously held views on the subject of the type species of these genera. In the present case this survey has shown that under the *Règles* the type species of *Cupido* Schrank is not *Papilio minimus* Fuessly but *Papilio arion* Linnaeus. This arises from the fact that Kirby's (1870) selection, as the type species of *Cupido* Schrank, of *Papilio alsus* [Denis & Schiffermüller] (*Ankündigung eines syst. Werkes Schmett. Wien. Gegend* : 184) (a junior subjective synonym of *Papilio minimus* Fuessly) is invalid, for although Schrank cited *Papilio minimus* Fuessly in the synonym of *Cupido puer* Schrank, he did not cite *Papilio alsus* [Denis & Schiffermüller]. The acceptance as the type species of *Cupido* Schrank of *Papilio arion* Linnaeus, the first of Schrank's included nominal species to be so selected (by Scudder in 1875) would not only involve a most undesirable overturning of the nomenclatorial practice of half a century, but in addition would lead to serious confusion by introducing into the subfamily PLEBEJINAE a genus (*Cupido* Schrank) which has not been regarded as belonging to it in living memory. I therefore ask the Commission to validate existing practice by using its Plenary Powers to set aside all existing type selections for the genus *Cupido*

Schrank, 1801, and to designate *Papilio minimus* Fuessly, 1775, to be the type species of that genus.

7. The acceptance of the foregoing proposal will involve the addition of the generic name *Cupido* Schrank to the *Official List of Generic Names in Zoology* and it is desirable that the opportunity should be taken to place on that List two other generic names in well-established use which are to some extent involved in the present case. The first of these names is *Maculinea* van Eecke, 1915, which would have been sunk as a synonym of *Cupido* Schrank if Scudder's (1875) selection of *Papilio arion* Linnaeus had been valid, the second is *Everes* Hübner, [1819], which would have disappeared in synonymy if Kirby's (1896) selection of *Papilio argiades* Pallas [the "male" of *Cupido puer* Schrank, 1801] had been valid. The type species of *Maculinea* van Eecke, 1915 (*Zool. Meded.* 1 : 28) is *Papilio alcon* [Denis & Schiffermüller] (*Ankündigung eines syst. Werkes Schmett. Wien. Gegend* : 182) by selection by Graves (P.P.), 1928 (*Ent. Rec.* 40 : 102). The type species of *Everes* Hübner [1819] (*Verz. bekannt. Schmett.* (5) : 69) is *Papilio amyntas* [Denis & Schiffermüller], 1775 (*Ankündigung eines syst. Werkes Schmett. Wien. Gegend* : 185) by selection by Scudder, [1872] (*4th Ann. Rep. Peabody Acad. Sci.* 1871 : 56). This name for the type species of the genus *Everes* Hübner is, however, invalid as it is a junior homonym of *Papilio amyntas* Poda, 1761 (*Mus. Ins. graec.* : 79). The oldest available name for this species is *Papilio argiades* Pallas, 1771 (which, it will be noted, would still have been the oldest name subjectively available for this species, even if the name *amyntas* [Denis & Schiffermüller], 1775, had not been invalid under the Law of Homonymy).

8. There is no junior objective synonym either of the name *Cupido* Schrank, 1801, defined in the manner recommended in paragraph 6 above. Nor is there any junior objective synonym of *Everes* Hübner, [1819]. In the case of *Maculinea* van Eecke, 1915, there is a genus *Argus* Boisduval, [1832] (*Icon. hist. Lépidopt. Europe* 1(5,6) : 49) which has as its type species by selection by Hemming, 1933 (*Entomologist* 66 : 224) the same species (*Papilio alcon* [Denis & Schiffermüller], 1775) as is the type species of *Maculinea* van Eecke, 1915. The name *Argus* Boisduval, [1832], is, however, a junior homonym of *Argus* Bohadsch, 1761. The work in which the latter name was published has been suppressed by the International Commission under its Plenary Powers (*Opinion* 185) but by a further direction given by the Commission in *Opinion* 429 (now in the press¹) this name was kept alive for the purposes of the Law of Homonymy. Accordingly, the name *Argus* Boisduval, [1832], is invalid as a junior homonym of *Argus* Bohadsch, 1761, and should now be placed on the *Official Index of Rejected and Invalid Generic Names in Zoology*.

9. When under the present proposals the foregoing names are placed on the *Official List of Generic Names in Zoology*, it will be necessary to assign an appropriate gender to each. The name *Cupido* Schrank, 1801, has been treated

¹ This *Opinion* was published on 26th October, 1956 (*Ops. Decls. int. Comm. zool. Nomencl.* 14 : 323—338).

by most authors as being masculine in gender, though by some the feminine gender has been assigned to it. On the question of the gender properly applicable to this name Professor L. W. Grensted, the Commission's Consulting Classical Adviser, has reported (*in litt.*, 12th June 1956) as follows:—" *Cupido* has both genders in classical Latin—as a common noun, meaning 'desire', it is usually, but not always feminine, but as a proper noun, meaning Cupid (very common in Latin), it is masculine. Clearly this was the meaning intended for the butterfly. It must be masculine and *Cupido minimus* is right." In view of Professor Grensted's report, clearly the gender to be attributed to this generic name is the masculine gender. The word "Everes" is a Latinised version of a Greek adjective and the gender of this generic name is masculine. The gender of the coined word "Maculinea" is feminine.

10. It is necessary now to consider the family-group-name problems involved in the present case. Here we have to note first that in 1907 Tutt erected nominal family-group taxa based respectively upon the genus *Everes* Hübner, [1819], and upon the genus *Cupido* Schrank, 1801. The nominal taxa concerned, each of which was regarded as being of tribe rank, were the following:—(1) EVERIDI Tutt, [1907] (*Nat. Hist. Brit. Butts.* 2 : 327) and (2) CUPIDIDI Tutt, [1907] (*ibid.* 2 : 327). Both these names were introduced in a rather casual manner in a discussion of the suprageneric classification of the family LYCAENIDAE (called by Tutt RURALIDAE), but there is no doubt as to the way in which these names were intended to be applied, for in the next volume of the same work Tutt dealt in detail both with the generic name *Everes* Hübner (Tutt, [1909] (*ibid.* 3 : 43–50)) and with the generic name *Cupido* Schrank (Tutt, [1909] (*ibid.* 3 : 101–104)).

11. The form (CUPIDIDI) adopted by Tutt when forming a family-group name based on the generic name *Cupido* Schrank is defective, for "the stem, for the noun *Cupido*, is 'Cupidin-' and in consequence CUPIDINIDI is correct" (Grensted, *in litt.*, 12th June 1956). In these circumstances the defective CUPIDIDI Tutt will need to be rejected as an Invalid Original Spelling.

12. At this point we have to note that a novel point affecting the interpretation of the *Règles* calls for consideration. This is the relative priority to be accorded to the names EVERIDI Tutt and CUPIDINIDI (correction of CUPIDIDI) Tutt. Both were published in the same book and on the same date and accordingly, if these were generic or specific names, the Law of the First Reviser would prevail and whichever of the two names was first definitely selected by a First Reviser would take precedence over the other name. The corresponding problem has never till now arisen at the family-group-name level and there exists at present no method for determining the relative precedence to be accorded to family-group names such as those cited above. To overcome this difficulty I am submitting to the International Commission simultaneously with

the present paper an application (Z.N.(S.) 1141) asking for a *Declaration* providing that the Law of the First Reviser shall apply to names for taxa of all ranks within the family-group when published in the same work and on the same date². At the present time *Everes* Hübner is commonly treated as the type genus of a family-group taxon and indeed in 1931 (*Act. Soc. ent. Jugoslavica*, 1930/1931 : 125) Lorković elevated this taxon to subfamily rank. The genera *Everes* Hübner and *Cupido* Schrank are commonly considered to be closely related to one another and in 1943 (*Farfall. diurn. Ital.* 2 : 85) Verity placed *Cupido* Schrank in the same tribe as *Everes*, adopting for that tribe the name *EVERIDI* Tutt and sinking as a synonym of that tribe-name the name *CUPIDIDI* Tutt. This action complies with the requirements prescribed to qualify the action of an author for recognition as action by a First Reviser. Accordingly under the terms of the proposed *Declaration* referred to above the name *EVERIDI* Tutt would take precedence over the name *CUPIDINIDI* Tutt, for authors who regarded the type genera of those taxa as properly referable to a single family-group taxon. At the same time the name *CUPIDINIDI* Tutt would remain available for use by authors who regarded the two genera concerned as being referable to different family-group taxa. Both names should now be placed on the *Official List of Family-Group Names in Zoology*, each being endorsed to show the First Reviser action taken by Verity in 1943 as indicated above. The genus *Maculinea* van Eecke, 1915, has not been taken as the type genus for a nominal family-group taxon.

13. For the reasons set out in the present application I now ask the International Commission on Zoological Nomenclature :—

(1) to use its Plenary Powers :—

- (a) to set aside all selections of type species for the genus *Cupido* Schrank, 1801, made prior to the Ruling now asked for ;
- (b) to secure the continued use of the above generic name in its accustomed sense by designating the nominal species *Papilio minimus* Fuessly, 1775, to be the type species of the genus so named ;

(2) to place the under-mentioned generic names on the *Official List of Generic Names in Zoology* :—

- (a) *Cupido* Schrank, 1801 (gender : masculine) (type species, by designation under the Plenary Powers under (1)(b) above : *Papilio minimus* Fuessly, 1775) ;
- (b) *Everes* Hübner, [1819] (gender : masculine) (type species, by selection by Scudder, [1872] : *Papilio amyntas* [Denis & Schiffermüller], [1775]) ;

² The application here referred to appears on pages 264–266 in the present Part.

- (c) *Maculinea* van Eecke, 1915 (gender : feminine) (type species, by selection by Graves (P.P.) (1928) : *Papilio alcon* [Denis & Schiffermüller], 1775).
- (3) to place the under-mentioned specific names on the *Official List of Specific Names in Zoology* :—
- (a) *minimus* Fuessly, 1775, as published in the combination *Papilio minimus* (specific name of type species of *Cupido* Schrank, 1801) ;
- (b) *argiades* Pallas, 1771, as published in the combination *Papilio argiades* ;
- (c) *alcon* [Denis & Schiffermüller], 1775, as published in the combination *Papilio alcon* (specific name of type species of *Maculinea* van Eecke, 1915) ;
- (d) *arion* Linnaeus, 1758, as published in the combination *Papilio arion* ;
- (4) to place the under-mentioned generic name on the *Official Index of Rejected and Invalid Generic Names in Zoology* :—*Argus* Boisduval, [1832] (a junior homonym of *Argus* Bohadsch, 1761) ;
- (5) to place the under-mentioned specific names on the *Official Index of Rejected and Invalid Specific Names in Zoology* :—
- (a) *puer* Schrank, 1801, as published in the combination *Cupido puer* and as determined by the lectotype selection by Hemming in paragraph 4 of the present application (a junior objective synonym of *minimus* Fuessly, 1775, as published in the combination *Papilio minimus*) ;
- (b) *amyntas* [Denis & Schiffermüller], 1775, as published in the combination *Papilio amyntas* (specific name of type species *Everes* Hübner, [1819] (a junior primary homonym of *amyntas* Poda, 1761, as published in the combination *Papilio amyntas*) ;
- (6) to place the under-mentioned family-group names on the *Official List of Family-Group Names in Zoology* :—
- (a) EVERIDI Tutt, [1907] (type genus : *Everes* Hübner, [1819]) selected under the *Declaration* asked for in Application Z.N.(S.) 1141³ to take precedence over CUPIDINIDI (correction of CUPIDIDI) Tutt, [1907], a name published in the same book and on the same date, by Verity (1943), acting as First Reviser) ;

³ The application here referred to is discussed in paragraph 12 of the present application. See also Footnote 1.

- (b) CUPIDINIDI (correction of CUPIDIDI) Tutt, [1907] (type genus : *Cupido* Schrank, 1801) (selected under the *Declaration* asked for in Application Z.N.(S.) 1141⁴ to rank for precedence below the name EVERIDI Tutt, [1907]), a name published in the same book and on the same date, by Verity (1943), acting as First Reviser) (for use by specialists who consider that the genera *Cupido* Schrank, 1801, and *Everes* Hübner, [1819] (type genus of the nominal family-group taxon EVERIDI Tutt, [1907]) are referable to different family-group taxa);

- (7) to place the under-mentioned family-group name on the *Official Index of Rejected and Invalid Family-Group Names in Zoology*:—CUPIDIDI Tutt, [1907] (type genus : *Cupido* Schrank, 1801) (an Invalid Original Spelling for CUPIDINIDI).

**SUPPORT FOR THE PROPOSAL BY DR. G. S. MYERS ON "CULTER"
AND "NASUS" BASILEWSKY, 1855 (CLASS PISCES)**

By **ETHELWYN TREWAVAS**

(*British Museum (Natural History), London*)

(Commission Reference : Z.N.(S.) 273)

(For the proposal in this case see *Bull. zool. Nomencl.* 12 : 136—138)

(Letter dated 20th August 1956)

I think that Basilewsky indicated, in as clear a manner as possible in 1855, that he intended *Cyprinus cultratus* Linnaeus and *Cyprinus nasus* Linnaeus to be the respective type species of these genera. The only difference between the two cases is that it is convenient in the interests of stability to obey the rules in the case of *Nasus* and to invoke the Plenary Powers to suspend the rules in the case of *Culter* and I therefore support Dr. Myers' application.

This provides, I think an interesting test-case of the Commission's policy with regard to the weight to be given to the demands of stability.

**SUPPORT FOR THE PROPOSAL BY W. D. L. RIDE ET AL REGARDING
THE NAME TO BE USED FOR THE HOTTENTOT TEAL (CLASS AVES)**

By **DEAN AMADON**

(*American Museum of Natural History, New York, U.S.A.*)

(Commission Reference : Z.N.(S.) 794)

(For the proposal in this case see *Bull. zool. Nomencl.* 12 : 35—48)

(Letter dated 21st August 1956)

I am very much in favor of the petition to retain the name *punctata*, as now used in the combination *Anas punctata*, for a species of African Marsh Duck. It would be extremely confusing to switch this name to the African Spine-tailed Duck.

⁴ See Footnote 1.

PROPOSAL THAT AS BETWEEN THE NAMES "PICTUS" GMELIN ("COLUBER") AND "BOIGA" LACÉPÈDE ("COLUBER"), PUBLISHED IN 1789 ON THE SAME DATE, PREFERENCE SHOULD BE GIVEN TO THE FORMER NAME. (SUPPLEMENT TO APPLICATION BY J. M. SAVAGE AND J. A. OLIVER IN REGARD TO THE GENERIC NAME "AHAETULLA" LINK, 1807) (CLASS REPTILIA)

By ROBERT MERTENS

(Senckenbergische Naturforschende Gesellschaft, Frankfurt a. M., Germany)

(Commission Reference : Z.N.(S.) 772)

(For the proposal submitted see 1956, *Bull. zool. Nomencl.* 12 : 147—152)

The proposals brought before the International Commission on Zoological Nomenclature by Savage & Oliver (1956, *Bull. zool. Nomencl.* 12 : 147—152) regarding the selection of a lectotype for *Coluber ahaetulla* Linnaeus, 1758, and the admission of the generic names *Ahaetulla* Link, 1807, *Leptophis* Bell, 1825, and *Dendrelaphis* Boulenger, 1890, to the *Official List* have my support, as well as the other proposals set out in paragraph 10 (pp. 151—152) of the paper referred to above. (It should be noted that in (2)(a) of the above paragraph the name *mycterizans* appears through some inadvertence in the incorrect form *mycterizana*.)

2. I am in agreement with the opinion expressed by Savage and Oliver in regard to the availability of the name *Coluber boiga* Lacépède, 1789 (*Quadr. Ovip.* 2 : 102). Nevertheless, I adhere to the view that the specific name *boiga* Lacépède, 1789, is not taxonomically valid—a point not discussed in Savage & Oliver's paper. The best known name for the snake to which the name *boiga* Lacépède applies is the name *pictus* Gmelin, [1789] (in Linnaeus, *Syst. Nat.* (ed. 13) 1(3) : 1116), as published in the combination *Coluber pictus*. This is the species currently known as *Dendrelaphis pictus* (Gmelin). This species is referred to under the name *pictus* Gmelin in numerous papers, e.g., by "Boulenger", 1890 (*Fauna Brit. Ind.*, Rept. : 337) and again in 1894 (*Cat. Snakes Brit. Mus.* 2 : 78). There would not have been any doubt today as to the taxonomic validity of the name *pictus* Gmelin if Stejneger had not slipped into the error of stating that the name *Coluber boiga* Lacépède was published as early as 1788 and therefore that it had priority over the name *Coluber pictus* Gmelin. Misled by this mistake of Stejneger's, Schmidt (K.P.) (1927, *Bull. Amer. Mus. nat. Hist.* 54 : 445) rejected the name *pictus* and introduced

in its place the name *boiga*. Later Stejneger (*Copeia* 1933 : 201) himself corrected the mistake which he had made in this matter. Up to the time of Schmidt's paper this species had almost always been known by the name *pictus* Gmelin and it is necessary to examine the validity of the action which he then took. He cannot, in my opinion, be regarded as having acted in this matter as a First Reviser, since the names *boiga* and *pictus* were published in different books and Article 28 of the *Règles* (which embodies the First Reviser Principle) applies only to names published in the same book. Moreover, he did not proceed from the supposition that the above names were published on the same date. I am convinced indeed that Schmidt would never have given *boiga* precedence over the name *pictus* if at that time he had known that both names were published in the same year (1789).

3. The exact date of publication in 1789 is not known either for the name *Coluber pictus* Gmelin or for the name *Coluber boiga* Lacépède. Accordingly both names rank, under a decision by the Thirteenth International Congress of Zoology, Paris, 1948 (1950, *Bull. zool. Nomencl.* 4 : 223—225), as from 31st December of the above year, that being the earliest date on which it is definitely known that they were published. In the absence of a decision by the International Commission there is therefore no means by which to determine to which of the above names preference should be given. I accordingly ask the International Commission to resolve this difficulty by giving a Ruling that preference is to be given to the name *pictus* Gmelin, the name most commonly used for the species concerned.

4. In addition to indicating my support for the proposals submitted by Savage & Oliver, I therefore ask the International Commission on Zoological Nomenclature :—

- (1) to give a Ruling that preference is to be given to the specific name *pictus* Gmelin, [1789], as published in the combination *Coluber pictus*, over the specific name *boiga* Lacépède, 1789, as published in the combination *Coluber boiga*, these names being names published in different books on unknown dates in the same year ;
- (2) to place on the *Official List of Specific Names in Zoology* the specific name *pictus* Gmelin, [1789], as published in the combination *Coluber pictus*, the entry so made to be endorsed in the manner recommended in (1) above.

**PROPOSED ADDITION TO THE " OFFICIAL INDEX OF REJECTED
AND INVALID WORKS IN ZOOLOGICAL NOMENCLATURE " OF
THE TITLE OF THE WORK " FORTEGNELSE OVER AFGANGNE
BISKOP FABRICIUSSES EFTERLADTE NATURALIER ", 1823**

By **HENNING LEMCHE**

(Universitetets Zoologiske Museum, Copenhagen, Denmark)

(Commission Reference : Z.N.(S.) 1137)

In *Opinion* 393 (1956, *Ops. Decls. int. Comm. zool. Nomencl.* 12 : 305—314), the International Commission on Zoological Nomenclature suppressed the name *Mellita* Fabricius (O.), 1823, in order to validate a later name in general use (*Mellita* Agassiz (J.L.R.), 1841). The Honorary Secretary has now asked me, as the Danish member of the Commission, for my views on the question whether this old Danish work ought now to be rejected once and for all, or alternatively whether the names published in it should be deemed available. In the present application, the results of my investigations are now presented.

2. The " Fortegnelse over afgangne Biskop Fabriciussess efterladte Naturalier " (" List of the late Bishop Fabricius' Natural History specimens ") is the concluding part (: 51—114) of a mere sale catalogue prepared by (or under the direction of) the procurator Thorbioernsen who was in charge of the auction. The title of the whole publication runs " Fortegnelse over en god og velkonditioneert Bogsamling . . . tilligemed en betydelig Deel Naturalier, hvoriblandt en Conchyliesamling, afgangne Biskop Fabricius's og efterlevende Enkes Bo tilhørende, som ved Auction Mandagen d. 13de Oktober . . . 8° Kjøbenhavn, 1823 " (" List of a good and well kept library . . . and also of a considerable number of Natural History specimens, including a shell collection, belonging to the property of the late Bishop Fabricius and his surviving widow, which is to be sold by auction on Monday the 13th Oct. . . ").

3. There cannot be the slightest doubt that this publication was not intended in any sense to be a scientific paper. However, the last item offered for sale in the Catalogue is (: 114) " Den afdodes Fortegnelse over de i dette Catalog nævnte Naturalier, 8 Dele i Quart " (" List prepared by the Deceased, of the Natural History specimens enumerated in this Catalogue. 8 parts in quarto "). The mentioning of this item makes it possible to maintain the view that the whole list is a posthumously published work prepared by Otto Fabricius.

4. In order to show the way in which the paper is presented, two examples of the text is given here, viz. :

page 51	page 91
A VERMES TESTACEA	692 Trochus scalaris indiae occidentalis
I. Multivalvea	93 Ditto var.
1. Chiton squamosus	94 ditto 2da var.
2. undatus	95 calcar majus
3. marmoratus	96 diaphanus
4. marmoreus	. .
. .	. .
. .	. .

5. Thus, as the list is a mere enumeration of names without the slightest definition, every new specific name mentioned in it is to be regarded as a *nomen nudum*. The same applies to all new generic names included for which no previously described nominal species is cited. But, the case of *Mellita* as referred to in paragraph 1 above shows that there may be other cases where generic names introduced in this paper have acquired availability by having been cited in connection with the name of some validly established nominal species of older date.

6. I have tried to ascertain whether any of the generic names introduced in the above work has come into actual use but, so far, it has not been possible to trace any case of that sort.

7. Accordingly, in order to put an end to any uncertainty regarding the status of names in this book, I ask the International Commission on Zoological Nomenclature :—

- (1) to give a Ruling that the paper by Otto Fabricius entitled "Fortegnelse over afgangne Biskop Fabriciussens efterladte Naturalier" printed in Copenhagen in 1823 is to be rejected as not having been duly published within the meaning of Article 25 of the *Régles*, as clarified by the Thirteenth International Congress of Zoology, Paris, 1948 (1950, *Bull. zool. Nomencl.* 4 : 217—221), this paper not being a document "issued for purposes of record and therefore of consultation by interested persons" but being "a document issued for exclusive consideration by special persons only" "for particular purposes" and "for a limited time";

- (2) to place the title of the above paper on the *Official Index of Rejected and Invalid Works in Zoological Nomenclature*.

PROPOSED USE OF THE PLENARY POWERS (a) TO SECURE THAT THE NAME "JURTINA" LINNAEUS, 1758, SHALL BE THE OLDEST AVAILABLE SPECIFIC NAME FOR THE SPECIES CURRENTLY KNOWN AS "MANIOLA JURTINA" (LINNAEUS, 1758) AND (b) TO PROTECT THE FAMILY-GROUP NAME "MANIOLIDI" VERITY, 1953 (CLASS INSECTA, ORDER LEPIDOPTERA)

By **FRANCIS HEMMING, C.M.G., C.B.E.**

(Secretary to the International Commission on Zoological Nomenclature)

(Commission Reference : Z.N.(S.) 1142)

The principal object of the present application is to ask the International Commission on Zoological Nomenclature to use its Plenary Powers to secure that the name *jurtina* Linnaeus, 1758, as published in the combination *Papilio jurtina*, shall be the oldest available name for the species currently known as *Maniola jurtina* (Linnaeus, 1758) (Class Insecta, Order Lepidoptera). The need for the use of the Plenary Powers in this case arises, as will be seen, from the decision of the Fourteenth International Congress of Zoology, Copenhagen, 1953, to re-instate the "First Reviser" Principle in a revised form in place of the "Principle of Page and Line Precedence" adopted by the preceding Congress in Paris in 1948 for determining the relative precedence to be accorded to names published in the same book and on the same page. A second and important purpose of the present application is to secure that the family-group taxon typified by the above species shall bear a name based on the generic name *Maniola* Schrank and not upon the name (a) *Epinephele* Hübner, [1819], a long-rejected junior subjective synonym of *Maniola* Schrank. The relevant particulars of both aspects of the present case are given in the following paragraphs.

2. The Meadow Brown, perhaps the commonest roadside butterfly in Europe, was given two names in 1758 by Linnaeus who, misled by the sexual dimorphism shown in this species, believed that the female represented one species and the male another. The nominal species so established were :— (a) *Papilio jurtina* Linnaeus, 1758 (*Syst. Nat.* (ed. 10) 1 : 475, no. 104), the habitat for which was given as "in Gramine *Europae, Africae*"; (b) *Papilio janira* Linnaeus, 1758 (*ibid.* 1 : 475, no. 106), the habitat for which was given as "in *Europae sylvis*". Of these names *jurtina* Linnaeus applied to the female, and *janira* Linnaeus to the male of the species with which we are here concerned.

3. Although Linnaeus himself never admitted that the above names applied to a single species, his mistake in this matter was noted by several authors

between the publication of the Tenth and Twelfth Editions of the *Systema Naturae*, e.g. by Scopoli (1763) and Müller (1764), but these authors contented themselves with pointing out that the names *jurtina* Linnaeus and *janira* Linnaeus applied to the same species but neither of them took the final step of accepting one of these names and rejecting the other. Neither of these authors can therefore be regarded as having acted as a First Reviser. The first author to do so was Fabricius (J.C.). In his two first works Fabricius accepted both the Linnean nominal species as good species; thus in 1775 (*Syst. Ent.* : 497-498) he treated *janira* as Species No. 235 and *jurtina* as Species No. 236, while in 1781 (*Spec. Ins.* 2 : 81) he treated the above nominal species as Species Nos. 358 and 359 respectively. When, however, we come to his next important work, we find that Fabricius had realised that Linnaeus' two names applied to the same taxon (*Mantissa Ins.* 2 : 44). On this occasion he accepted the name *janira* Linnaeus as the name for this species, allotting to it the Species No. 433, and at the same time he rejected the name *jurtina* Linnaeus, stating that it was only a name for the other sex of *janira* Linnaeus, to which he sunk it as a junior synonym. Fabricius' actual comment on *jurtina* Linnaeus was "Sp. Ins. 2.81.359 [i.e. *Papilio janira*] pura sexus varietas". The foregoing action by Fabricius complies in every respect with the requirements incorporated in Article 28 by the Copenhagen Congress and accordingly Fabricius is to be accepted as having acted as a First Reviser in the *Mantissa* of 1787. Accordingly, under the above Article the name *janira* Linnaeus is to be accorded precedence over the name *jurtina* Linnaeus.

4. Although in Fabricius' day and for more than a hundred years thereafter there was no International Code of Zoological Nomenclature, zoologists in general accepted the idea that in cases of difficulty a First Reviser's choice was binding and for the next seventy years the name *janira* Linnaeus was almost universally applied to the present species, the name *jurtina* Linnaeus virtually disappearing from the literature. At the beginning of the second half of the XIXth century the tendency to accept the principle of page and line precedence, which later was to become so widespread in entomological literature, began to make itself felt and already as early as 1861 Staudinger (O.) in the first edition of his famous Catalogue (1861, in Staudinger (O.) & Wocke (M.), *Cat. Lép. Europ.* (1) : 13), while retaining the name *janira* Linnaeus, suggested that *jurtina* Linnaeus had priority ("nomen anterius, recipiendum?"). Staudinger repeated this observation ten years later in the second edition of his Catalogue (: 31). In the same year (1871) Kirby (W.F.) in his *Synonymic Catalogue of Diurnal Lepidoptera* (: 77), which for so many years exercised a predominant influence on the nomenclature used for the butterflies definitely adopted the name *jurtina* Linnaeus for this species, sinking the name *janira* Linnaeus as a junior synonym. The same course was followed by Staudinger himself in 1901 in the third edition of his Catalogue (: 62). The influence of these works was so great that for the last seventy or eighty years the name *jurtina* Linnaeus has completely replaced the name *janira* Linnaeus as the specific name for this species. In 1913 (*J. linn. Soc. Lond.*, Zool. 32 : 184-185) in a review of the syntypes in the Linnean collection of butterflies at Burlington

House, Verity drew attention to the differences in the descriptions and in the localities given by Linnaeus for *janira* Linnaeus and *jurtina* Linnaeus respectively and, as First Reviser, designated North Africa as the Restricted Locality for *Papilio jurina* Linnaeus and "Central-Europe" as the restricted locality for *Papilio janira* Linnaeus. Under this action the name *janira* Linnaeus became the oldest available name for the Central European subspecies of the Meadow Brown, while the name *jurtina* Linnaeus became the valid name for the North African subspecies which at that time was confused with the insular subspecies *fortunata* Alphéraky, 1889 (*Epinephele janira* var. *fortunata* Alphéraky, 1889, in Romanoff, *Mém. Lépid.* 5 : 222, pl. 11, fig. 4♀) described from Orotava in Teneriffe in the Canary Islands.

5. Kirby's action in 1871 would undoubtedly have constituted a valid First Reviser selection of *jurtina* Linnaeus in preference to *janira* Linnaeus if it had not been for the prior selection made in the opposite sense by Fabricius in 1787. In the absence of an international code of zoological nomenclature the action of Fabricius had no binding force in Kirby's day and the importance attaching to it was completely overlooked after the Berlin Congress had embodied the "First Reviser" principle in the Code then adopted. It would, however, cause great confusion and quite unwarranted name-changing if the long-overlooked First Reviser selection by Fabricius were now to be adopted. I accordingly ask the International Commission to use its Plenary Powers to set aside the selection made by Fabricius and to direct that the name *jurtina* Linnaeus, 1758 (*Papilio*) be accorded precedence over the name *janira* Linnaeus, 1758.

6. The species with which we are here concerned is the type species of the genus *Maniola* Schrank, 1801 (*Faun. boic.* 2(1) : 152, 170), but there is a minor technical difficulty which requires to be straightened out before the position can be regarded as wholly satisfactory. The nominal genus *Maniola* was established by Schrank to embrace the whole of the species of the family SATYRIDAE known to him as occurring within the area covered by his book and from the species so included it is evident that, if Schrank had been dealing with the whole European fauna, he would have included all the European SATYRIDAE in his genus *Maniola*. In this respect Schrank therefore anticipated by nine years the action of Latreille in establishing the genus *Satyrus*, which has since become the type genus of this family and has been placed on the *Official List* (*Opinion* 142). Of the twenty-nine nominal species placed by Schrank in the genus *Maniola* the tenth (Species No. 1305) was the new nominal species *Maniola lemur* (: 175). This was introduced to embrace the nominal species *Papilio jurina* Linnaeus, 1758 (*Syst. Nat.* (ed. 10) 1 : 475) and *Papilio janiro* Linnaeus, 1758 (*ibid.* 1 : 475). As explained in paragraph 3 above, the two Linnean names have long been recognised as applying to the female and male respectively of a single species. The name *lemur* Schrank has never been used by any subsequent author, having always been treated as a junior subjective synonym of one or other of the above names. Under the clarifica-

tion of the provisions of Article 31 adopted by the Fourteenth International Congress of Zoology, Copenhagen, 1953 (1953, *Copenhagen Decisions zool. Nomencl.* : 72-74, Decisions 136-137) it is now possible to give a determinate content to the nominal species *Maniola lemur* Schrank by selecting a lectotype for it from the material cited by Schrank. This I now do by selecting the specimen on which Linnaeus based his description of *Papilio jurtina* to be the lectotype of Schrank's nominal species *Maniola lemur*. By this selection the specific name *lemur* Schrank becomes a junior objective synonym of *jurtina* Linnaeus, 1758.

7. The type species of *Maniola* Schrank was selected—though in rather a peculiar manner—by Scudder in 1875 (*Proc. amer. Acad. Arts Sci.*, Boston 10 : 211). In order to understand the method adopted by that author in this important work it is necessary to recall (1) that for each nominal genus dealt with he cited the nominal species placed in the genus concerned by its original author but in addition placed in brackets any of those names which in Kirby's *Syn. Cat. diurn. Lep.* of 1871 had been rejected as a junior synonym of some other name, (2) that in each case where the name of an originally included species was placed in brackets in this way Scudder placed in front of it the name adopted for the species concerned in Kirby's *Catalogue*. In the case of the genus *Maniola* Scudder cited the specific name *lemur* Schrank in brackets and placed in front of it the specific name *jurtina* Linnaeus, 1758, the name applied to the species concerned in Kirby's *Catalogue*. Next, Scudder printed the name *jurtina* in bold-faced type, the method used throughout his paper to denote that the species in question was the type species of the genus concerned. Up till 1948 it was doubtful whether this method of selecting a type species complied with the requirements of Rule (g) in Article 30 of the *Règles*. In that year, however, the Thirteenth International Congress of Zoology, Paris, inserted in the *Règles* a provision validating the foregoing method of selecting a type species for a genus (1950, *Bull. zool. Nomencl.* 4 : 179-180, Point 69(3)(b)), the purpose of this decision being to avoid the far-reaching and totally unwarranted confusion which would have followed from the rejection of the large number of type selections previously made in this way. Accordingly, under the foregoing provision Scudder is to be accepted as having made a valid selection of *Maniola lemur* Schrank, 1801, to be the type species of the genus *Maniola* Schrank, 1801. At this point we have to recall that under the Commission's recently adopted *Declaration 21*¹:—"Where one of two or more objectively identical nominal species is designated, indicated or selected as the type species of a genus, that genus shall be cited as having as its type species the oldest established of the nominal species concerned". In the present case the lectotype selection for the nominal species *Maniola lemur* Schrank, 1801, made in paragraph 6 above has made the nominal species *Maniola lemur* Schrank, 1801, and *Papilio jurtina* Linnaeus, 1758, objectively identical with one another,

¹ This *Declaration* was published on 19th June 1956 as Part 11 of Vol. 12 of the *Opinions and Declarations Series*.

the specific name *lemur* Schrank having thus become a junior objective synonym (instead of, as hitherto, only a junior subjective synonym) of *jurtina* Linnaeus, 1758. Accordingly, under the provisions of *Declaration* 21 referred to above the genus *Maniola* Schrank, 1801, is, through Scudder's action in 1875, to be cited as having as its type species the nominal species *Papilio jurtina* Linnaeus, 1758, and not the objectively identical nominal species of later date *Maniola lemur* Schrank, 1801.

8. It is necessary now to consider the family-group-name aspects of the present case. There are two of these. For the first of these for which until recently no guidance was provided in the *Règles* the requisite remedy has now been provided by the Commission through its *Declaration* 28.² The second problem arises from a well-intentioned but most unfortunate decision by the Copenhagen Congress of 1953 and the requisite relief in this case is obtainable only by the use by the Commission of its Plenary Powers. The family-group names involved are the following :—

EREBIINAE Tutt, 1896, *Brit. Butts.* : 87, 402 (type genus : *Erebia* Dalman, 1816, *K. Vetensk. Akad. Handl.*, Stockholm 1816 (No. 1) : 58)

EPINEPHELDIDI Tutt, 1896, *Brit. Butts.* : 87, 376, 402 (type genus : *Epinephele* Hübner, [1819], *Verz. bekannt. Schmett.* (4) : 59)

MANIOLIDI Reuter (E.), 1897, *Act. Soc. Sci. fenn.* 22 : 356 (type genus : *Maniola* Schrank, 1801, *Faun. boic.* 2(1) : 152, 170) (based upon an incorrect interpretation of the genus *Maniola* Schrank, 1801)

MANIOLIDI Verity (R.), 1953, *Farfalle diurn. Italia* 5 : 228, 237 (type genus : *Maniola* Schrank, 1801, correctly interpreted).

9. It will be convenient to consider first the problem, for which a remedy has been provided by the Commission through its *Declaration* 28. As shown above the first author to establish a nominal family-group taxon based upon the generic name *Maniola* Schrank was Reuter in 1897. It is necessary first to note that in 1871 Kirby (*Syn. Cat. diurn. Lep.*) without any justification sank the name *Erebia* Dalman as a junior synonym of *Maniola* Schrank (: 57) and placed in the latter genus (: 66) the nominal species *Papilio ligea* Linnaeus, 1758 (*Syst. Nat.* (ed. 10) 1 : 473), the type species by original designation of *Erebia* Dalman, together with all the other species currently regarded as belonging to Dalman's genus. At the same time Kirby placed in the genus *Epinephele* Hübner the nominal species *Papilio jurtina* Linnaeus, 1758, which, as shown in paragraph 7 above is the type species of *Maniola* Schrank, 1801. This was the arrangement followed by Reuter who, after citing *Erebia* Dalman as a junior synonym of *Maniola* Schrank and enumerating the species which he considered to belong to this genus (: 131), erected for it the nominal tribe MANIOLIDI (: 356). Under the Commission's recent *Declaration* 28

² Now in the press.

an author establishing a new family-group taxon is to be assumed to have correctly determined the type genus, subject to the condition that, where, in the opinion of later authors, there is evidence in the original publication that the author of a family-group name treated the type genus of the family-group taxon concerned as having as its type species some nominal species other than that which already was or later became the type species, the case is to be referred to the International Commission for decision. It is further provided in the foregoing *Declaration* (a) that on the receipt of such an application, it shall be the duty of the Commission to determine whether or not the original author of the family-group name concerned misdetermined the genus selected by him as the type genus of the nominal family-group taxon in question and (b) that, where the Commission rules that the type genus of such a taxon was misdetermined, the family-group name in question is to be rejected as possessing no rights under either the Law of Priority or the Law of Homonymy. In view of the evidence provided by Reuter's paper referred to above, I ask that under the foregoing *Declaration* the Commission should now rule that the nominal family-group taxon MANIOLIDI Reuter, 1897, was based upon a misdetermined type genus and that that name is therefore to be rejected. Thus, the name MANIOLIDI Reuter, 1897, does not invalidate as a homonym the later name MANIOLIDI Verity, 1953, a name based upon a correct determination of *Maniola* Schrank, 1801, its type genus.

10. The second point which calls for attention arises out of the fact that, as noted in paragraph 9 above, the genus *Maniola* Schrank was formerly commonly known by its junior subjective synonym *Epinephele* Hübner, [1819] (type species, by selection by Butler, 1868 (*Ent. mon. Mag.* 4 : 194) : *Papilio janira* Linnaeus, 1758). It was so treated by Tutt when in 1896 he established the nominal tribe EPINEPHELIDI. The name EPINEPHELIDI Tutt, 1896, having priority over the name MANIOLIDI Verity, 1953, becomes under the unfortunate *Decision* 54(1)(a) of the Copenhagen Congress (1953, *Copenhagen Decisions zool. Nomencl.* : 36) referred to in paragraph 8 above the valid name for the family-group taxon typified by the genus *Maniola* Schrank, 1801. Nothing could be more confusing and objectionable than the sudden resurrection at the family-group-name level of the long-discarded generic name *Epinephele* Hübner, [1819]. In order to avoid this highly undesirable result the International Commission is asked to use its Plenary Powers to suppress the family-group name EPINEPHELIDI Tutt, 1896. This procedure is recommended in preference to the use of the Plenary Powers to direct that this name should not be used in preference to the name MANIOLIDI Verity, 1953, for, as the type species of the respective type genera of these nominal family-group taxa are subjectively identified with one another, it is impossible to imagine any circumstances in which the name EPINEPHELIDI Tutt could be required in addition to the name MANIOLIDI Verity.

11. Of the generic names discussed in the present application the name *Maniola* Schrank has no junior objective synonyms. In the case of the name *Erebia* Dalman, 1816, there is, however, one junior objective synonym which

should now be placed on the *Official Index*. This is the name *Epigea* Hübner, [1819] (*Verz. bekannt. Schmett.* (4) : 62), the type species of which, by selection by Hemming, 1933 (*Entomologist* 66 : 198), is *Papilio ligea* Linnaeus, 1758, which, as noted in paragraph 9 above, is the type species by original designation of the genus *Erebia* Dalman.

12. For the reasons set out in the present application the International Commission on Zoological Nomenclature is asked :—

(1) to use its Plenary Powers :—

(a) to set aside all selections by First Revisers as to the relative precedence to be accorded respectively to the specific name *jurtina* Linnaeus, 1758, as published in the combination *Papilio jurtina*, and the specific name *janira* Linnaeus, 1758, as published in the combination *Papilio janira*, these being names published in the same work and on the same date, made under Article 28 of the *Règles* prior to the Ruling now asked for, and, having done so, to direct that the name *jurtina* Linnaeus, 1758, as published in combination with the generic *Papilio*, is to take precedence over the name *janira* Linnaeus, 1758, as published in combination with the same generic name ;

(b) to suppress the family-group name EPINEPHELIDI Tutt, 1896 (type genus : *Epinephele* Hübner, [1819]) for the purposes of the Law of Priority but not for those of the Law of Homonymy ;

(2) under *Declaration* 28 to rule that the nominal family-group taxon MANIOLIDI Reuter, 1897, was based upon a misdetermined type genus and therefore that the above name possesses no status under either the Law of Priority or the Law of Homonymy ;

(3) to place the under-mentioned generic names on the *Official List of Generic Names in Zoology* :—

(a) *Maniola* Schrank, 1801 (gender : feminine) (type species, under *Declaration* 21, through the selection by Scudder (1875) of *Maniola lemur* Schrank, 1801, (which under the lectotype selection made in paragraph 6 of the present application is a junior objective synonym of *Papilio jurtina* Linnaeus, 1758) : *Papilio jurtina* Linnaeus, 1758) ;

(b) *Erebia* Dalman, 1816 (gender : feminine) (type species, by original designation : *Papilio ligea* Linnaeus, 1758) ;

(4) to place the under-mentioned specific names on the *Official List of Specific Names in Zoology* :—

(a) *jurtina* Linnaeus, 1758, as published in the combination *Papilio jurtina*, a name taking precedence over the name *janira* Linnaeus,

- 1758, as published in the combination *Papilio janira* under the Ruling under the Plenary Powers asked for in (1)(a) above (specific name of type species of *Maniola* Schrank, 1801) ;
- (b) *janira* Linnaeus, 1758, as published in the combination *Papilio janira*, a name ranking for precedence below the name *jurtina* Linnaeus, 1758, as published in the combination *Papilio jurtina* under the Ruling under the Plenary Powers asked for in (1)(a) above ;
- (c) *fortunata* Alphéraky, 1889, as published in the combination *Epinephele janira* var. *fortunata* ;
- (d) *ligea* Linnaeus, 1758, as published in the combination *Papilio ligea* (specific name of type species of *Erebia* Dalman, 1816) ;
- (5) to place the under-mentioned generic name on the *Official Index of Rejected and Invalid Generic Names in Zoology* :—*Epigea* Hübner, [1819] (a junior objective synonym of *Erebia* Dalman, 1816) ;
- (6) to place the under-mentioned specific name on the *Official Index of Rejected and Invalid Specific Names in Zoology* :—*lemur* Schrank, 1801, as published in the combination *Maniola lemur* and as defined by the lectotype selection made in paragraph 6 of the present application (a junior objective synonym of *jurtina* Linnaeus, 1758, as published in the combination *Papilio jurtina*) ;
- (7) to place the under-mentioned family-group names on the *Official List of Family-Group Names in Zoology* :—
- (a) MANIOLIDI Verity, 1953 (type genus : *Maniola* Schrank, 1801), as validated by the suppression under the Plenary Powers of the name EPINEPHELIDI Tutt, 1896, asked for in (1)(b) above ;
- (b) EREBIINAE Tutt, 1896 (type genus : *Erebia* Dalman, 1816) ;
- (8) to place the under-mentioned family-group names on the *Official Index of Rejected and Invalid Family-Group Names in Zoology* :—
- (a) MANIOLIDI Reuter (E.), 1897 (type genus : *Maniola* Schrank, 1801) (invalid under the ruling given in (2) above under *Declaration 28* because type genus based upon an incorrectly determined type species) ;
- (b) EPINEPHELIDI Tutt, 1896 (type genus : *Epinephele* Hübner, [1819]), as suppressed under the Plenary Powers, as asked for under (1)(b) above.

PROPOSED USE OF THE PLENARY POWERS TO IDENTIFY THE NOMINAL SPECIES "HYLA VENULOSA" LAURENTUS, 1768, WITH THE NOMINAL SPECIES "HYLA ZONATA" SPIX, 1824. (SUPPLEMENT TO APPLICATION BY W. E. DUELLMAN) (CLASS AMPHIBIA)

By ROBERT MERTENS

(Senckenbergische Naturforschende Gesellschaft, Frankfurt a.M., Germany)

(Commission Reference : Z.N.(S.) 771)

(For the proposal in this case see 1956, *Bull. zool. Nomencl.* 12 : 143-146)

On the proposal by Duellman for the suppression of the name *Hyla venulosa* Laurentus, 1768 (1956, *Bull. zool. Nomencl.* 12 : 143-146) I have the following observations to make.

2. The name *Hyla venulosa* Laurentus is so well known to every herpetologist as the name for a neotropical species of tree-frog that I should regret to see its disappearance from the literature and its replacement by the completely unknown name *Hyla zonata* Spix, 1824. It is, in my opinion, one of the most important duties of the International Commission to preserve names which are in common use in cases where there is agreement among specialists as to the species to which those names are applied. Such names should not be rejected by too rigorous an interpretation of the Rules.

3. In the present case I recommend that the specific name *venulosa* Laurentus, 1768, should be preserved by the Commission for use in its accustomed sense, that is, in the sense of *zonata* Spix, 1824, as published in the combination *Hyla zonata*, as cited in Duellman's application. Under this proposal the name *Hyla zonata* Spix would become a junior objective synonym of *Hyla venulosa* Laurentus. The latter name would become also the oldest name objectively applicable to the species which is the type species of *Phrynohyas* Fitzinger, 1843. I agree with Duellman that the name *Phrynohyas* Fitzinger, 1843, should be given preference over *Acrodytes* Fitzinger, 1843, if *Hyla venulosa* Laurentus is separated from the genus *Hyla* Laurentus.

COMMENTS ON THE PROPOSAL CONCERNING THE GENERIC NAME
"APUS"

(Commission Reference : Z.N.(S.) 1020)

(For the proposal in this case see *Bull. zool. Nomencl.* 12 : 67—85)

(a) By W. MEISE

(Hansestadt Hamburg, Bornplatz, Germany)

(Letter dated 18th August 1956)

In thanking Dr. Holthuis for a copy of his and your paper on *Apus*, I should very much like to say that my comment is a full "yes" concerning birds, which I known better than "*Apus productus*" (as we named the Phyllopod when we caught it alive near Berlin, 30 years ago). It seems to me that this is an ideal case for the Commission, as they have only to fix matters as they are now, and to fit them under the Rules as far as possible.

(b) By K. H. VOOUS

(Zoologisch Museum, Amsterdam, Holland)

(Letter dated 20th August 1956)

I take much pleasure in informing you that I am strongly supporting the recommendations made by Dr. L. B. Holthuis and you relative to the use of the generic name *Apus* Scopoli, 1777 with type species *Hirundo apus* Linnaeus 1758 and the family-group name APODINAE (Class Aves) as well as all other recommendations for the use or the rejecting of other avian specific, generic and group names in the *Bulletin of Zoological Nomenclature* Vol. 12, pages 81—85.

(c) By ALAN LONGHURST

(London)

(Letter dated 24th August 1956)

You may be aware of my recent systematic review of the Notostraca in *Bull. Brit. Mus. (nat. Hist.)* 3(1) : 1—57 in which I have made use of the nomenclature whose usage you are seeking to regulate; I am fully in agreement with your proposals with regard to the nomenclature to be adopted in the Notostraca and deplore the retention of *Apus* Scopoli, 1777, for a genus of Swifts, I am not competent to comment but on the strength of the arguments you advance and on its very widespread acceptance among ornithologists, I would feel that you are correct in its usage.

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THE BULLETIN OF ZOOLOGICAL NOMENCLATURE

The Official Organ of
THE INTERNATIONAL COMMISSION ON
ZOOLOGICAL NOMENCLATURE

Edited by
FRANCIS HEMMING, C.M.G., C.B.E.

Secretary to the International Commission on Zoological Nomenclature

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BULLETIN OF ZOOLOGICAL NOMENCLATURE

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30th November 1956

NOTICES PRESCRIBED BY THE INTERNATIONAL CONGRESS OF ZOOLOGY

The following notices are given in pursuance of decisions taken, on the recommendation of the International Commission on Zoological Nomenclature (see 1950, *Bull. zool. Nomencl.* 4 : 51-56, 57-59), by the Thirteenth International Congress of Zoology, Paris, July 1948 (see 1950, *Bull. zool. Nomencl.* 5 : 5-13, 131).

(a) Date of commencement by the International Commission on Zoological Nomenclature of Voting on applications published in the "Bulletin of Zoological Nomenclature"

NOTICE is hereby given that normally the International Commission will start to vote upon applications published in the *Bulletin of Zoological Nomenclature* on the expiry of a period of six calendar months from the date of publication in the *Bulletin* of the applications in question. Any specialist who may desire to comment upon any of the applications published in the present Part (Vol. 12, Part 11) of the *Bulletin* is accordingly invited to do so in writing, and in duplicate, to the Secretary to the Commission, as quickly as possible and in any case, in sufficient time to enable the communication in question to reach the Secretariat of the Commission before the expiry of the six-month period referred to above.

(b) Notice of the possible use by the International Commission on Zoological Nomenclature of its Plenary Powers in one case

NOTICE is hereby given that the possible use by the International Commission on Zoological Nomenclature of its Plenary Powers is involved in an application published in the present Part of the *Bulletin of Zoological Nomenclature* in relation to the following case :—

PIERIDAE Duponchel, 1832, validation of family-group name (Class Insecta, Order Lepidoptera) (Z.N.(S.) 289).

2. Comments received in sufficient time will be published in the *Bulletin* : other comments, provided that they are received within the prescribed period

of six calendar months from the date of publication of the present Part will be laid before the International Commission on Zoological Nomenclature at the time of commencement of voting on the application concerned.

3. In accordance with the procedure agreed upon the Session held by the International Commission on Zoological Nomenclature in Paris in 1948 (see 1950, *Bull. zool. Nomencl.* 4 : 56), corresponding Notices have been sent to the serial publications *Nature* and *Science*.

FRANCIS HEMMING

*Secretary to the International Commission on
Zoological Nomenclature*

28 Park Village East, Regent's Park,
LONDON, N.W.1, England.

30th November 1956.

PROPOSED USE OF THE PLENARY POWERS TO VALIDATE THE SPELLING "PIERIDAE" AS AGAINST THE SPELLING "PIERIDIDAE" AS THE FAMILY-GROUP NAME BASED ON THE GENERIC NAME "PIERIS" SCHRANK, 1801 (CLASS INSECTA, ORDER LEPIDOPTERA)

By **FRANCIS HEMMING, C.M.G., C.B.E.**

(Secretary to the International Commission on Zoological Nomenclature)

(Commission Reference : Z.N.(S.) 289)

The purpose of the present application is to ask the International Commission on Zoological Nomenclature to give a Ruling on the question whether the family-group name based on the generic name *Pieris* Schrank, 1801 (Class Insecta, Order Lepidoptera) should (a) by direction under the Plenary Powers be formed as PIERIDAE, the form by far the most commonly employed or (b) be formed as PIERIDIDAE, the spelling which is technically correct.

2. This question was first brought to the attention of the International Commission in June, 1947 by Dr. Jiří Paclt (then of the Národní Museum v Praze, Prague, and now of Bratislava, Czechoslovakia), who advocated the adoption of the spelling PIERIDIDAE. Dr. Paclt's paper is annexed to the present note as Appendix 1.

3. At Paris 1948 the Thirteenth International Congress of Zoology gave directions that the whole question of the provisions in the *Règles* relating to the formation of family-group names should form the subject of consultation with interested specialists with a view to the submission of comprehensive proposals on this subject to the next International Congress when it should meet at Copenhagen in 1953. The decisions taken by that Congress (1953, *Copenhagen Decisions zool. Nomencl.* : 32—37, Decisions 43—58) made possible the further consideration of the present case.

4. By a decision taken in 1948 as part of the settlement of the question of the names for genera of the Sub-Order Rhopalocera cited in Hübner's *Tentamen*, the generic name *Pieris* Schrank, 1801, was placed on the *Official List of Generic Names in Zoology* as Name Number 704 by the Ruling given in *Opinion* 278 (1954, *Ops. Decls. int. Comm. zool. Nomencl.* 6 : 135—178). For this reason also it is desirable that an early decision should be taken by the International

Commission as to the form to be adopted for forming the family-group name based upon this generic name.

5. The present is the first case on which the Commission has been asked to take a decision on the question of the form to be adopted for a family-group name where the strictly correct form is not in harmony with general usage. Special consideration was accordingly given to the form of procedure to be adopted in submitting this matter to the Commission. It was decided that in view of the wide interest to lepidopterists of the problem raised in this case exceptional measures should be taken to secure statements from interested specialists of their views as to the action which it was desirable should be taken before the case was published in the *Bulletin*. The advance information so obtained would, it was considered, be of special value in that it would, it was hoped, provide an indication of the spread of opinion among specialists and thus afford a basis on which to prepare proposals for the consideration of the International Commission.

6. As a preliminary to the initiation of the proposed consultation referred to above, it was decided to clear the ground on the issue of fact involved in this case by asking Professor the Rev. L. W. Grensted, Consulting Classical Adviser to the International Commission, to furnish a Report on the question of what under the *Règles* was the correct form of the family-group name based on the generic name *Pieris* Schrank. Professor Grensted's Report, which fully confirmed Dr. Paclt's view that the correct spelling for this family-group name was *PIERIDIDAE*, was as follows :—

The early generic names of butterflies were largely based on the names of goddesses and nymphs in classical mythology. *Pieris* is probably meant as a singular from "*Pieridae*", the Muses. It happens also to occur in classical Latin as a personal name, *Pieris*, genitive *Pieridis*. For both reasons the stem is "*Pierid-*" and the correct family name would be *PIERIDIDAE*. The Greek name for the Muses, *Pierides*, confirms this.

7. At this point it may be convenient to summarise briefly as follows the historical background of the present case :—

- (1) The generic name *Pieris* Schrank was first taken as the base for a family-group name by Duponchel in 1832 (in Godart, *Hist. nat. Lép. France Suppl.* 1 : 381. This name was there cited both in French (as "*Piérides*") and in Latin (as *Pierides*).)
- (2) From Duponchel's time onwards this taxon has been cited under the name *PIERINAE* or *PIERIDAE* in all the principal catalogues, checklists, standard works and monographs and in the great majority of individual papers.

- (3) In a paper published in 1853 (*Lepid. exot. Spec. nov.* : 54) Herrich-Schäffer employed the term PIERIDINA, a spelling which implies that, if the name had been formed as the name of a family with the approved termination, that name would have been spelled as PIERIDIDAE. This name actually first so spelled by Reuter in 1897 (*Acta Soc. Sci. fenn.* 22 : 228). It has since been used by a number of authors in individual papers. It has also been used in one important modern work (Nordström, Wahlgren & Tullgren, 1935, *Svenska Fjärilar*). These usages represent, however, only a very small percentage of the combined usage of the spellings PIERIDIDAE and PIERIDAE, the majority of authors having continued to use the shorter form of this name.

8. In the spring of 1956 I prepared a paper to be despatched to interested specialists seeking their views as to the relative acceptability of the two forms which had been used for the family-group names based upon the generic name *Pieris* Schrank. The paper concluded with the following paragraph in which was set out the questions on which advice was sought :—

The question for which answers are now sought are the following :—

- (1) Do you consider that the International Commission should take such action as is necessary to secure that the family name based upon the generic name *Pieris* Schrank, 1801, shall be PIERIDAE, the spelling used therefor by almost all workers both at the present time and throughout the period since the above genus was made the type genus of a family-group taxon ?

OR

- (2) Do you consider that the normal rules should be allowed to operate in the present case and therefore that the spelling PIERIDIDAE should be accepted for this family name ?

9. I next invited Mr. N. D. Riley (*British Museum (Natural History), London*) to assist in drawing up the list of specialists to whom copies of the paper referred to above should be sent. The list as finally drawn up contained forty-five names. The specialists so consulted were the following :—

(a) *Europe* :

R. Agenjo (*Madrid*) ; G. Bernardi (*Paris*) ; H. Beuret (*Neuwelt pres Basle*) ; J. A. Bourgogne (*Paris*) ; W. Forster (*Munich*) ; W. J. Hall (*London*) ; E. Handschin (*Basle*) ; F. Hemming (*London*) ; E. M. Hering (*Berlin*) ; S. Hoffmeyer (*Aarhus*) ; N. Knaben (*Oslo*) ;

H. de Lesse (*Paris*); Z. Lorković (*Zagreb*); A. M. Morley (*Folkestone*); M. Opheim (*Oslo*); B. Petersen (*Uppsala*); N. D. Riley (*London*); B. N. Schwanwitsch (*Leningrad*); R. Verity (*Florence*); P. E. L. Viette (*Paris*); B. C. S. Warren (*Folkestone*);

(b) *Asia* :

Hem Singh Pruthiy (*Panjab University*); A. Sibatani (*Japan*);

(c) *Africa* :

L. A. Berger (*Belgian Congo*); T. H. B. Jackson (*Kitale, Kenya*); H. K. Munro (*Pretoria*); R. Paulian (*Madagascar*); V. G. L. van Someren (*Nairobi*); G. van Son (*Pretoria*);

(d) *Australia* :

J. A. Nicholson (*Canberra*);

(e) *North America* :

B. P. Beirne (*Ottawa*); F. Martin Brown (*Colorado Springs*); C. F. dos Passos (*Mendham, N.J.*); D. C. Ferguson (*Halifax, N.S.*); W. Field (*Washington, D.C.*); J. G. Franclemont (*Ithaca, N.Y.*); A. B. Klots (*New York City*); J. McDunnough (*Halifax, N.S.*); E. G. Munroe (*Ottawa*); C. L. Remington (*New Haven, Conn.*); E. C. Zimmerman;

(f) *Central and South America* :

H. E. Box (*Trinidad*); A. da Costa Lima (*Rio de Janeiro*); R. Ferreira d'Almeida (*Rio de Janeiro*); K. J. Hayward (*Tucumán*).

10. As the result of the consultations carried out by the Office of the Commission the views of thirty-seven (37) specialists have been obtained. Of these specialists twenty-eight (28) advocated the adoption by the Commission of a decision in favour of the technically incorrect spelling PIERIDAE, and nine (9), including Dr. J. Paclt, by whom (as explained in paragraph 2 above) this question was first placed before the Commission, favour the application of the normal provisions of the *Règles* and consequently recommend the acceptance of the spelling PIERIDIDAE. Extracts from the communications so received are given in Appendix 2 (support for PIERIDAE) and Appendix 3 (support for PIERIDIDAE) annexed to the present paper.

11. I set out below the action by the International Commission which would be called for (1) if it approved the majority recommendations now placed

before it in favour of the spelling PIERIDAE (Alternative "A") and (2) if it approved the minority recommendations now placed before in favour of the spelling PIERIDIDAE (Alternative "B") :—

Alternative "A"

(validation of the spelling "PIERIDAE")

- (1) Suppression under the Plenary Powers of the spelling PIERIDIDAE for the name of the family-group taxon having *Pieris* Schrank, 1801, as its type genus and validation of the spelling PIERIDAE for the above taxon.
- (2) Addition of PIERIDAE (correction under (1) above of PIERIDES) Duponchel, 1832 (type genus: *Pieris* Schrank, 1801) to the *Official List of Family-Group Names in Zoology*.
- (3) Addition to the *Official Index of Rejected and Invalid Family-Group Names in Zoology* of: (a) PIERIDES Duponchel, 1832 (an Invalid Original Spelling under (1) above for PIERIDAE), (b) PIERIDINA Herrich-Schäffer, 1853 (an Invalid Original Spelling for PIERIDIDAE suppressed under (1) above), (c) PIERIDIDAE (correction of PIERIDINA) Herrich-Schäffer, 1853 (first published in this form by Reuter in 1897) (spelling suppressed under (1) above).

Alternative "B"

(acceptance of the spelling "PIERIDIDAE")

- (1) Rejection of the proposal (a) for the suppression under the Plenary Powers of the spelling PIERIDIDAE for the name of the family-group taxon having *Pieris* Schrank, 1801, as its type genus and (b) for the validation of the spelling PIERIDAE for the above taxon.
- (2) Addition to the *Official List of Family-Group Names in Zoology* of PIERIDIDAE (correction of PIERIDES) Duponchel, 1832 (type genus: *Pieris* Schrank, 1801).
- (3) Addition to the *Official Index of Rejected and Invalid Family-Group Names in Zoology* of: (a) PIERIDES Duponchel, 1832 (an Invalid Original Spelling for PIERIDIDAE); (b) PIERIDAE Duponchel, 1844 (*Cat. méth. Lépid. Eur.* : 23) (an Erroneous Subsequent Spelling for PIERIDIDAE).

APPENDIX 1

On the philological inconvenience of the well-known family name "PIERIDAE"

By JIRÍ PACLT

(National Museum, Prague, Czechoslovakia)

It seems to me necessary to call attention to the correct form of the family name used for an important group of butterflies comprising the "Whites" and the "Yellows".

2. As the type genus of the above-mentioned family *Pieris* Schrank, 1801, must be considered. To find the derivation of this name there is a Latin index of *nomina propria* which is very useful. "*Pieris*" was a Muse, but it should be realised that the stem of the name does not appear in the supposed form "*Pier-*" (thence PIERIDAE). The name "*Pieris*", as may be seen from whichever Latin dictionary may be consulted, has the genitive "*Pieridis*". From this, the stem will be obtained when the suffix "-is" is taken off, namely "*Pierid-*".

3. Article 4 of the International Code says: "The name of a family is formed by adding the ending '*idae*', the name of a subfamily by adding '*inae*', to the stem of the name of one of the included genera, which would then be regarded as the type genus" (modified text recommended by the British National Committee on Entomological Nomenclature in 1928, and used here on the grounds that it is preferable to the official text).¹

4. In accordance with the fact that the stem of the name "*Pieris*" is "*Pierid-*", and with the directions of the relevant Article of the International Code, the grammatically correct and nomenclatorially valid form of the family name is PIERIDIDAE.

History

5. The family was called PIERIDAE by Duponchel (1844, *Cat. Lép. Europ.* :23) as a modification of that author's own PIERIDES (1832, in Godart, *Hist. nat. Lép. France*, Suppl. 1 : 381). The first author to recognise the grammatical character of the name in question was Herrich-Schäffer (1853, *Lepid. exot.* 54) who used the name PIERIDINA for these butterflies.

¹ The suggested re-wording of Article 4 here referred to was not subsequently approved by the International Congress of Zoology and accordingly never acquired any official status. The provisions in the *Règles* relating to the formation of family-group names were completely re-modelled by the Fourteenth International Congress of Zoology, Copenhagen, 1953 (see 1953, *Copenhagen Decisions zool. Nomencl.* : 32-37). The wording of the provision referred to by Dr. Paclt was revised but the basic meaning of this provision remained unaltered.

6. Unfortunately the family for the "Whites" and "Yellows" has, with some exceptions, been known as PIERIDAE since Duponchel. The correct name PIERIDIDAE was used—to my knowledge—by the following authors only :—

Reuter (1896, *Acta. Soc. Sci. fenn.* 22 : 228 et ff); Grote (1900, *Proc. amer. phil. Soc.* 39 : 13); Grote (1901, *Verh. zool.-bot. Ges. Wien* 51 : 659); Jachontov (1904, *Rev. russ. Ent.* 4 : 15); Strand (1910, *Wien. ent. Z.* 29 : 30); Grünberg (1910, *Denkschr. med.-naturwiss. Ges. Jena* 16 : 111); Grünberg (1911, *Stett. ent. Z.* 72 : 378); Strand (1912, *Arch. Naturg.* A11 : 67; *id.*, 1913, *ibid.* A2 : 10—22; *id.*, 1914, *ibid.* A10 : 105; *id.* 1916, *ibid.* A5 : 100; *id.*, 1918, *Soc. ent.* 33 : 20); Biezanko (1924, *Arch. Naturg.* 90, A5 : 243); Caland (1925, *Ent. Ber.* 6 : 388—396); Strand (1927, *Arch. Naturg.* 91, A12 : 281); Halik (1929, *Brehms Tierleben* (Czech edition) vol. 1, tab. 9, pp. 322—323; in the German edition of 1915 by R. & H. Heymons on p. 329 of the 4th edition, tome 2, the name is used only in the subfamily sense as PIERIDINAE); Nordström, Wahlgren & Tullgren (1935, *Svenska Fjärilar* (1), Almén, Delen : 20, 78, 79, 82, (2), *Syst. Delen* : 4); Nordström (1943, *Opusc. ent.* 8 : 62); Paclt (1944, *Acta Soc. ent. Bohem.* 41 : 122, 124); Bryk (1944, *Ark. Zool.* 36A (No. 3) : 3); *id.*, 1946, *ibid.* 38A (No. 3) : 13; Paclt (1946, *Biol. Listy* 27 : 31); Paclt (1947, *Acta. Soc. ent. Czechosl.* 44 : 40).

APPENDIX 2

Comments received from specialists who favour the commonly current spelling "PIERIDAE"

1. G. van Son (*Pretoria*) (18th June 1956)

The name PIERIDAE has been in universal use throughout lepidopterological literature, notwithstanding the fact that old workers in this field were usually possessed of a better knowledge of classical languages than many modern workers are. When the family is referred to in the vernacular, it is always spoken of as Pierid, not Pieridid, and the butterflies are given as Pierids, not Pieridids.

In view of the above, I am strongly in favour of the name PIERIDAE being preserved in preference to PIERIDIDAE. This view is shared by Dr. H. K. Munro, Entomologist in charge of the National Collection of Insects of the Union Department of Agriculture.

2. H. K. Munro (*Pretoria*) (18th June 1956)

For Dr. Munro's views, see No. 1 above.

3. J. McDunnough (*Halifax, Canada*) (18th June 1956)

The question of whether the name PIERIDAE should be changed to PIERIDIDAE. I am against making such a change on the excuse of a mere technicality. As you state, the form PIERIDAE has been for so long in general use that it would mean upsetting the stability we are all so keen on establishing merely to satisfy the whims of Latin purists.

4. A. Sibatani (*Glasgow*) (19th June 1956)

The traditional usage of PIERIDAE should be maintained and any change of the family name for merely formal reason should be objected.

5. W. Forster (*München*) (19th June 1956)

Zweifellos ist vom philologischen Standpunkt die Ableitung PIERIDIDAE korrekt und richtig. Im Interesse der Stabilität der Nomenklatur lehne ich aber eine Änderung des allgemein eingeführten Namens PIERIDAE energisch ab und stehe auf dem Standpunkt, dass die Stabilität der Nomenklatur in diesem Falle philologischen Erwägungen, mögen sie auch noch so berechtigt sein, vorzuziehen hat. Ich bin also der Meinung, dass der Name PIERIDAE beibehalten werden sollte.

6. H. E. Box (*Trinidad*) (19th June 1956)

My knowledge of these matters is so limited that I fear my opinion can have little value, but for what it is worth I would, on purely conservative grounds, favour alternative (1) [PIERIDAE] rather than (2) [PIERIDIDAE].

7. N. D. Riley (*London*) (20th June 1956)

I feel strongly that this is a case in which long usage should outweigh linguistic niceties. The Whites are a family of butterflies of considerable interest outside the realms of taxonomy and nomenclature. They concern the agriculturist, the geneticist, the general biologist, and others, who would be much confused by the change which, if made, could not conceivably benefit anyone. I am strongly opposed to it.

8. H. M. Pruthi (*Panjab*) (20th June 1956)

I have considered the matter and feel that we should stick to the name PIERIDAE instead of adopting PIERIDIDAE.

9. W. J. Hall (*London*) (20th June 1956)

I have no hesitation in saying that in my opinion this is a case where the International Commission should take the action necessary to secure that this family name should be PIERIDAE.

10. R. Verity (*Firenze, Italy*) (20th June 1956)

There is no serious reason for zoologists to trouble with orthographic correctness. According to my view one should be very careful before launching a new name but, once it has been erected, zoologists should follow the *Règles* strictly, by which it has been provided that names should be stable and cannot be altered.

11. E. M. Hering (*Berlin*) (21st June 1956)

The International Commission should take such action as is necessary to secure that the family name based upon the generic name *Pieris* Schrank, 1801, shall be PIERIDAE, by reasons both of the priority of Westwood, 1839, of this taxon name, and in the interest of the stability of the current nomenclatorial practice.

12. L. A. Berger (*Belgian Congo*) (21st June 1956)

Je veux bien admettre que le terme PIERIDIDAE est plus correct au point de vue grammatical que le terme PIERIDAE, mais l'application de ce premier terme ne nous fera pas faire un seul pas en avant et il n'aidera en rien le domaine scientifique.

Si le terme *PIERIDAE* est moins correct, il est en tout cas infiniment plus fréquemment employé que celui proposé par le Dr. Paclt et, malgré tout le respect que je porte au code de nomenclature, je continuerai quelles que soient les décisions qui seront adaptées, je continuerai à employer le terme *PIERIDAE*, car il est bien plus connu que l'autre et parce qu'il ne s'agit plus ici d'une question de nomenclature mais d'une question grammaticale. Je fais de l'entomologie et non de la grammaire ; les recherches que demande l'entomologie sont déjà suffisamment longues que pour ne pas encore perdre un temps précieux à des questions aussi peu importante que celle soulevée par le Dr. Paclt.

Pour me resumer, je suis donc formellement opposé à l'application du terme *PIERIDIDAE* et continuerai à utiliser uniquement le terme *PIERIDAE*.

13. R. Paulian (*Madagascar*) (21st June 1956)

Il est absolument indiscutable que l'application stricte des règles de la grammaire classique voudrait la transformation de ce nom en *PIERIDIDAE*, mais il nous paraît de façon catégorique qu'il y aurait tout intérêt à ce que le nom de famille *PIERIDAE* soit conservé tel par une décision de la Commission Internationale.

Dans le cas particulier, la transformation suggérée aurait l'inconvénient d'introduire une coupure entre les usages de tous les spécialistes travaillant sur la famille depuis 1839, et l'usage nouveau, et la transformation du nom de famille, simplement pour l'accorder avec des règles grammaticales, ne paraît pas se justifier.

14. B. C. S. Warren (*Folkestone*) (22nd June 1956)

I certainly consider such action should be taken as to retain the spelling of the name as *PIERIDAE* for the following reasons : (a) the proposed change is purely pedantic and serves no practical purpose ; (b) if adopted the same course would have to be taken (and has been already by supporters of this view) in the case of *NYMPHALIDAE* ; (c) the result of adding the extra " id " would make the name troublesome to write and to pronounce ; (d) the change would seem, to be in opposition to Article 19 of the Code.

My friend, Mr. A. M. Morley, who is both a keen entomologist and a life long classical adviser is absolutely opposed to the change and thinks it would only cause both spellings to be used, the majority of workers following the form in all the standard works. He admits *PIERIDIDAE* may be more correct but that both are quite artificial words, and that *PIERIDIDAE* combines a Latin patronymic with a Greek patronymic which is not satisfactory, and therefore there is no absolute standard of correctness for either.

I would add that such a change would have the unfortunate effect of encouraging collectors to ignore the Code, even those who most wish to uphold it.

15. A. M. Morley (*Folkestone*) (22nd June 1956)

For Mr. Morley's views, see No. 14 above.

16. B. Petersen (*Uppsala*) (22nd June 1956)

I think I prefer the form **PIERIDAE** because it is the spelling most commonly used.

17. B. N. Schwanwitsch (*Leningrad*) (28th June 1956)

I decidedly think that **PIERIDAE** should be preferred to **PIERIDIDAE**. The former is in great use in this country, also in Russian transcription.

18 and 19. N. Knaben and M. Opheim (*Oslo*) (5th July 1956)

We consider that the International Commission should take such action as is necessary to secure that the family name based upon the generic name *Pieris* Schrank, 1801, shall be **PIERIDAE**.

20. D. C. Ferguson (*Halifax, Canada*) (8th July 1956)

I feel that in this case the almost universal usage of **PIERIDAE** should certainly overrule any attempt to replace it with the technically correct form.

21. H. Beuret (*Neuwelt, Switzerland*) (12th July 1956)

Considering the fact of the world-wide use of the long established name **PIERIDAE** I think that a change based on linguistic grounds would cause too much trouble and open the same question in a great number of similar cases. In my opinion the proposed change involves therefore a great danger for nomenclature and the price which we would have to pay for a "correct spelling" is obviously too high!

22. F. Hemming (*London*) (20th July 1956)

With reference to Commission Circular Z.N.(S.) 289, dated 7th June 1956 I write to inform you that I am strongly in favour of the use by the International Commission of its Plenary Powers to validate the spelling **PIERIDAE** for the family name based on the generic name *Pieris* Schrank. Nomenclature is a good servant but a bad master and I am of the opinion that where in any particular case the application of the normal provisions of the *Règles* would

lead to serious disturbance in current nomenclatorial practice, the proper course is for the Commission to prevent this from happening by the use of its Plenary Powers. This principle has been embodied in the Preamble annexed to the *Règles* by the Copenhagen Congress and is no longer a matter for discussion.

In this particular case there is an overwhelming preponderance of usage in favour of the spelling *PIERIDAE* and there would seem to me to be no justification in abandoning this spelling for the correct but virtually unknown spelling *PIERIDIDAE*.

23. T. H. B. Jackson (*Kitale, Kenya*) (21st July 1956)

There appears to be no doubt that the correct spelling of this taxon should be *PIERIDIDAE* and, if this were and was likely to remain, an isolated case the Commission might well rule its acceptance. It seems to me, however, that this would create a highly dangerous precedent, involving as it does, the alteration of the name of so high a category as a family. It would be very difficult thereafter to refuse to allow similar alterations and might well, should the opposite action be taken now, lead to chaotic conditions in the future.

24. W. E. Field (*Washington, U.S.A.*) (26th July 1956)

I consider that the International Commission should take such action as is necessary to secure that the family-name based upon the generic name *Pieris* Schrank, 1801, shall be *PIERIDAE*, the spelling used therefore by almost all workers both at the present time and throughout the period since the above genus was made the type genus of a family-group taxon by Westwood in 1839.

25. E. C. Zimmerman (*U.S.A.*) (29th July 1956)

This is a difficult question with much to be said in favour of either side. In general I would agree that if it can be proved beyond doubt that there is an error in construction of a name, then it may be best to correct it. However, the names *PIERIDAE* and *PYRALIDAE*, at least, were originally spelt in that form and were so used for many years by many authors. Some of these authors were experienced writers of Latin, and they did not use the forms *PIERIDIDAE* and *PYRALIDIDAE*. Moreover, the forms *PIERIDIDAE*, *PYRALIDIDAE*, etc., are awkward to spell and to pronounce. I believe that this is a case where priority and history indicate that the forms *PIERIDAE* and *PYRALIDAE* should be placed on the accepted *List*. I doubt that stability can be had until decisions are taken (arbitrary if need be) by the Commission and the names placed on the *Official List*.

26. F. Martin Brown (*Colorado Springs, U.S.A.*) (9th August 1956)

There can be no argument but that *PIERIDIDAE* and *PIERIDINAE* are orthographically correct, if the names derive from *πιερίδες*. I believe, however, that there may be a way to retain the old spellings without direct action of the

Commission. The Pierides derived their name from the Macedonian district *περία* from which PIERIDIDAE and PIERINAE, I believe, can be legally derived. Since we do not know if Westwood had in mind the Muses or the land from which they derived their name I see no reason to assume either position but acceptance of the land rather than the young ladies does less to confuse the situation. When a name has been used as consistently as those under discussion for so long a time I feel every effort must be made to retain the long-accepted spelling if possible.

27. P. E. L. Viette (*Paris*) (13th August 1956)

I consider that the International Commission should take such action as is necessary to secure that the family-name based upon the generic name *Pieris* Schrank, 1801, shall be PIERIDAE.

28. A. J. Nicholson (*Canberra*) (21st August 1956)

I have considered the question of the name PIERIDAE raised in your letter and have also had comments from some of the Officers of this Division who are interested.

To us there is no doubt that the form PIERIDAE should be retained for this family. We believe the danger of establishing a precedent which might be exploited by workers on many other groups with long-established names would be too great to warrant the change. The difficulty raised by Dr. Paclt could best be resolved by adding the family name PIERIDAE to the *Official List of Family-Group Names*. The name PIERIDAE is short, euphonious and thoroughly established. A change would result in quite unnecessary confusion and, we feel, would be a retrograde step.

APPENDIX 3

Comments received from specialists who favour the acceptance of the spelling
"PIERIDIDAE"1. J. Paclt (*Bratislava, Czechoslovakia*)

[Dr. Paclt, who was the first to bring the present problem before the International Commission, advocates the acceptance of the spelling PIERIDIDAE. Dr. Paclt's paper is being published as Appendix 1 to the present paper.]

2. E. G. Munroe (*Ottawa*) (20th June 1956)

My feeling on this question is strong and clear. Although the proposed Preamble to the Rules, the resolution adopting the principle of conservation, and two of the four drafts of a specific expression of that principle, were all worded so as to apply to names at all levels, these instruments were intended to preserve well-established names threatened by the law of priority, not to preserve minor errors of elementary grammar or spelling for which an automatic corrective procedure is provided. The whole tendency of the Copenhagen Decisions was (a) to extend and improve such automatic correctives and (b) to reduce the load of specific rulings previously imposed on the Commission. The principle of the present question was virtually decided when the Copenhagen Congress agreed that family names based on classical generic names should be formed by appropriate replacement of the genitive ending of the generic name (*Copenhagen Decisions on Zoological Nomenclature* : 34, Para. 50(1)(a)), and that any contravention of this should be automatically corrected (*ibid.*, Para. 50(1)(b)) ; this decision specifically replaced the widely criticized decision of the Paris Congress (*Bull. zool. Nomencl.* 4 : 246, Conclusion 9) that family names should be based on an indeterminate "stem" of the name of the type genus.

No real issue of intelligibility or stability arises here. The change is simply from an incorrect to a correct and obviously related form, and should cause only very minor inconvenience. On the other hand to perpetuate the erroneous form under suspension of the Rules would open the door to a possibly large number of similar applications, with the danger of imposing a considerable body of work on the Commission and its secretariat in connection with really inconsequential cases. The only possible argument is that of stability, to which it can be answered that to admit cases of the present type would be to undermine, if not actually to vitiate, the decision adopted at Copenhagen, itself a reversal of the Paris decision. Such vacillation on points of principle, where there is a clear automatic, and not seriously inconvenient procedure already laid down, would in my opinion be a much more serious menace to stability and to the respect the Rules command, than would the occasional introduction of an extra syllable required by correct declension.

In the very rare cases where the genitive form is so different from the nominative as to be virtually unrecognizable, the situation is quite different, and there might be practical grounds for a *conservandum* ruling.

The real mystery is why Dr. Paclt has thought it necessary to trouble the Commission with this matter, when the *Copenhagen Decisions* specifically provide that corrections such as the one he advocates are to be made automatically. Surely the onus is on opponents of the required change to present an application for suspension of rules, and Dr. Paclt's current application is unnecessary and out of order.

3. C. F. dos Passos (*Washington Corners, U.S.A.*) (21st June 1956)

The proposed change of PIERIDAE to PIERIDIDAE by the addition of one syllable of two letters is more of a correction in spelling than a change of name. If it were necessary to propose a new name for *Pieris* Schrank so that the family name should be changed the question would be serious.

On the other hand PIERIDAE has been used so long and so uniformly that it is a great pity that someone has discovered that this name was never written correctly.

I am inclined to believe that such a slight change in the spelling of this family name would cause little or no confusion and therefore feel that, as scientists desired to attain perfection the normal rules should be allowed to operate in this case and that the spelling PIERIDIDAE should be accepted for this family name.

4. A. da Costa Lima (*Manguinhos, Brazil*) (25th June 1956)

Pieris: As was made clear by Grensted, the stem of the word being "Pierid", the correct name of the family derived from it must be, according to the Rules, PIERIDIDAE.

5. V. G. L. van Someren (*Ngong, Kenya*) (27th June 1956)

On the evidence produced, my opinion is that the name which should be used is PIERIDIDAE. I therefore support the alternative (2) of your note. In an issue involving a major family I think we must be guided by what is correct technically and not be influenced by what one can term "common usage".

6. R. Ferreira d'Almeida (*Rio de Janeiro*) (27th June 1956)

The genitive of the Latin name *Pieris* is "Pieridis", its radical thus being "Pierid". According to this the correct name of this family must be, I think, PIERIDIDAE. I therefore agree that the family name established with the genus *Pieris* Schrank, 1801, must be accepted as PIERIDIDAE instead of PIERIDAE.

7. K. J. Hayward (*Tucumán*) (31st July 1956)

With reference to the suggested change of the family name **PIERIDAE** to **PIERIDIDAE**, I am of the opinion that the old and incorrectly formed name **PIERIDAE** should be amended to **PIERIDIDAE**, thus settling this disputed point once and for all without leaving a loophole for any further discussion.

8. C. L. Remington (*New Haven, Connecticut*) (10th October 1956)

I feel strongly with Dr. Paclt that the correct name for the family including *Pieris* should be **PIERIDIDAE**, and I have so spelled it in my own recent papers. Before doing so, several years ago, I consulted by Yale colleague, Professor Alfred R. Bellinger, Chairman of our Classical Department and something of an amateur lepidopterist as well as a distinguished Latin scholar. His conclusion was that of Professor Grensted quoted in the Annexe to your letter.

It is my view that the rule for the formation of family names is a good one, easy enough to apply, and that no exceptions should be made for family names. The Plenary Powers appear to me to be much too actively in use and the present case is one of many in which I hope they will not be invoked. If the Commission does not act conservatively on the procedure of by-passing the Rules, I believe an increasing number of thoughtful taxonomists will feel logically obliged to pick and choose among the uses of the Plenary Powers and ignore those which are to them unreasonable.

As for the question of changing familiar names for organisms, I believe that so many changes are inescapable (for taxonomic rather than nomenclatorial reasons), that all taxonomic users necessarily must be accustomed to some instability. They will easily adjust to logically proper changes like **PIERIDIDAE** with little more than discomfort than a grumble for "the good old days". Use of the Plenary Powers to conserve names, as I have written before, should be reserved for rare instances in which a name unusually well-known and widely used in the non-taxonomic (economic, physiological, genetical, etc.) literature is threatened.

9. J. Bourgogne (*Paris*) (3rd November 1956)

Il est regrettable d'avoir à modifier un nom (**PIERIDAE**) universellement employé depuis une centaine d'année et un très grand nombre de fois.

Cependant, puisque la forme **PIERIDIDAE** est la seule qui soit correcte, il me semble qu'on doit adopter cette forme. La persistance prolongée d'une erreur n'est pas une excuse, et à mon avis le terme **PIERIDIDAE** devait être adopté définitivement.

Cette modification n'est d'ailleurs pas grave, car elle n'entraînera aucune confusion (ce qui n'est pas le cas de nombreuses modifications proposées et adoptées au moins momentanément). J'ai employé la forme **PIERIDIDAE** dans *Le Traité de Zoologie de P.P. Grassé*.

PROPOSED USE OF THE PLENARY POWERS TO PRESERVE AND
INTERPRET THE SPECIFIC NAME " VENULOSA " LAURENTI,
1768, AS PUBLISHED IN THE COMBINATION " HYL
VENULOSA " (CLASS AMPHIBIA) : SUPPORT FOR PROPOSAL
SUBMITTED BY PROFESSOR ROBERT MERTENS

By HOBART M. SMITH

(University of Illinois, Department of Zoology, Urbana, Illinois, U.S.A.)

(Commission Reference : Z.N.(S.) 771)

(For Professor Merten's proposal see *Bull. zool. Nomencl.* 12 : 287)

(statement communicated under cover of a letter dated 16th October 1956)

In my opinion all of the requests embodied in the application Z.N.(S.) 771 submitted by William E. Duellman (1956, *Bull. zool. Nomencl.* 12 : 143—146) merit approval by the International Commission with the exception of Proposal (1)(b)(i) in paragraph 10 where he recommends that the specific name *venulosa* Laurenti, 1768, as published in the combination *Hyla venulosa* be suppressed under the Plenary Powers. In connection with this proposed exception, I think it right to draw the attention of the Commission to the following facts namely : (a) that the name *venulosa* in the combination *Hyla venulosa* has been almost universally applied to this species-group (up until recently thought to represent but one species) for over 150 years ; (b) that the name is particularly appropriate for some member of this species group, which possesses a powerful integumentary poison ; (c) that in view of these facts preservation of the name for some member of this group would seem appropriate especially since such preservation would in no way disturb the established nomenclature but would on the contrary maintain it ; (d) that the name may, as a *nomen dubium*, arbitrarily be restricted to the species that most appropriately might bear the name, in lieu of a later but less familiar and less appropriate *nomen indubium*.

With these considerations in mind I wrote a letter to the Office of the Commission in which I suggested that, instead of suppressing the specific name *venulosa* Spix, as proposed by Duellman, the Commission should use its Plenary Powers definitely to attach that name either to the specimen upon which Spix in 1824 based his nominal species *Hyla zonata* or to the specimen upon which in 1877 Cope based his nominal species *Hyla spilomma*. In making

this suggestion, I expressed a preference for the adoption of the first of these alternatives rather than the second (a) because the nominal species *Hyla venulosa* Laurenti has been commonly interpreted as representing a species having a South American center of distribution and (b) because the specific name *zonata* Spix has enjoyed scarcely any usage at all, whereas the name *spilomma* Cope has been in common use since 1945 for a Mexican and Central American species.

I have since been informed by the Secretary that a formal application for the use by the Commission of its Plenary Powers for the purpose of linking the names *venulosa* Laurenti and *zonata* Spix (thus making the two names objective synonyms of one another) has been received from Professor Robert Mertens of Frankfurt a.M. This is exactly the solution which I myself favor and in the circumstances I have pleasure in withdrawing my proposal and in submitting in its place the present note of support for the proposal recommended by Professor Mertens.

**SUPPORT FOR A. E. ELLIS'S APPLICATION REGARDING THE
NAME "UNIO" PHILIPSSON, 1788 (CLASS PELECYPODA)**

By **HUGH WATSON**

(Cambridge, England)

(Commission Reference : Z.N.(S.) 451)

(For the application in this case see *Bull. zool. Nomencl.* 11 : 337-343)

(Enclosure to letter dated 3rd September 1956)

I strongly support the application of Mr. A. E. Ellis asking the International Commission to use its Plenary Powers to validate the currently accepted usage of the well-known generic name *Unio* Philipsson, 1788, with *Mya pictorum* Linnaeus as the type species, instead of transferring the name *Unio* to the distinct genus containing *Mya margaritifera* Linnaeus, and employing the name *Limnaea* Poli, 1791, for that containing *Mya pictorum*, as the strict application of the ordinary Rules would seem to require. It is obvious that thus to transfer the name *Unio* to a different genus from that to which it has been applied for more than a century and to use in its place a name so closely resembling the well-known generic name *Limnaea* Lamarck, 1799, widely used for a common genus of fresh-water Gastropods, would cause the utmost confusion and should be prevented. But the action required for this purpose is merely for the Commission to set aside all type selections of the genus *Unio* Philipsson prior to Gray's selection of *Nya pictorum* Linnaeus made in 1847 and widely followed ever since thus making this selection definitely valid. For the Commission to reject this and all other type selections hitherto made, and then to select anew the same species itself, as suggested, might give the false impression that the selection was taken on the initiative of the Commission itself, whereas in fact it was first put forward by Gray.

**SUPPORT FOR THE PROPOSAL MADE BY CHARLES VAURIE
FOR THE SUPPRESSION UNDER THE PLENARY POWERS OF THE
PAMPHLET BY R. B. HORNIMAN ENTITLED "PRELIMINARY
DESCRIPTIONS OF SOME NEW BIRDS"**

(Commission Reference : Z.N.(S.) 782)

(For the proposal in this case see *Bull. zool. Nomencl.* 11 : 344-346)

(a) By **RAYMOND A. PAYNTER, Jr.**

(*Museum of Comparative Zoology at Harvard College, U.S.A.*)

(Letter dated 3rd October 1956)

I wish to record that I am in favour of suppressing for nomenclatorial purposes, under the Plenary Powers of the International Commission on Zoological Nomenclature, the pamphlet by R. B. Horniman, entitled "Preliminary Descriptions of Some New Birds", as outlined by Dr. Charles Vaurie in the *Bulletin of Zoological Nomenclature*.

(b) By **ALDEN H. MILLER**

(*University of California*)

(Letter dated 5th October 1956)

At the request of Charles Vaurie I have examined his proposal in the *Bulletin of Zoological Nomenclature*. I find myself in favour of avoiding the use of the names in the pamphlet by Horniman, but I would prefer that this be done by ruling that the item has not been "published" in a technical sense. I see no real reason for going beyond and setting aside the names otherwise.

(c) By **H. E. WOLTERS**

(*Aachen, W. Germany*)

(Letter dated 12th October 1956)

While I cannot do anything to solve the question whether or not Horniman's paper has been duly published under the rules, having not seen a copy myself, I think that it is highly desirable that Horniman's names be suppressed, not because they have been ignored by later authors, an argument that would hold good in the case of newly found old names only, but because the pamphlet is so rare that it can be seen by hardly any ornithologist, which would create an everlasting source of trouble in defining the exact meaning of Horniman's names, especially as the new subspecies and species described by the author are of doubtful validity. Therefore I am prepared to support Dr. Vaurie's view that Horniman's names should be suppressed.

(d) By **G. NIETHAMMER**

(*Bonn, W. Germany*)

(Letter dated 12th October 1956)

I have read the paper of Charles Vaurie published in the *Bulletin of Zoological Nomenclature*, and I should like to tell you that I agree with the proposal of Mr. Vaurie as given in his paper No. 6.

(e) By **GUY MOUNTFORT**
(Hon. Sec., British Ornithologists' Union, London)

(Letter dated 12th October 1956)

I strongly support Dr. Vaurie's views on the Horniman pamphlet, as set out in the *Bulletin of Zoological Nomenclature*.

I feel that the best course would be for the Commission to use its Plenary Powers to suppress the Horniman pamphlet for nomenclatorial purposes, and that this might be a more desirable solution than to declare the pamphlet not to have been "published", in view of the lack of information concerning its author's whereabouts. Not to take action in this matter would be to perpetuate an embarrassing situation which is bound to cause confusion.

(f) By **R. VERHEYEN**
(Institut Royal des Sciences Naturelles de Belgique)

(Letter dated 12th October 1956)

Par l'intermédiaire de notre Collègue M. Charles Vaurie je viens de recevoir "the proposed suppression for nomenclatorial purposes of Horniman's pamphlet: *Preliminary Descriptions of some new Birds*".

Je ne reconnais la publication de Horniman ni de nom ni de fait, étant donné que l'auteur a négligé de veiller à la bonne divulgation de son pamphlet. Je me rallie donc la proposition de supprimer.

(g) By **R. E. MOREAU**
(British Ornithologists' Union)

(Letter dated 17th October 1956)

I am entirely in favour of the suppression of the Horniman pamphlet for nomenclatorial purposes under the Plenary Powers.

(h) By **ERWIN STRESEMANN**
(Berlin)

(Letter dated 19th October 1956)

I wish to state that I am in favour of Dr. Ch. Vaurie's proposal referring to H. B. Horniman's "Preliminary Description . . . 1940", as expressed in the *Bull. zool. Nomencl.*

(i) By **JEAN DORST**
(Muséum National d'Histoire Naturelle, France)

(Letter dated 20th October 1956)

Je viens de recevoir une lettre du Dr. Ch. Vaurie, New York, ainsi qu'un tiré à part d'une note parue dans le *Bull. zool. Nomencl.* concernant un écrit de H. B. Horniman.

Il me semble évident que si cet écrit est considéré comme valide au point de vue nomenclature, il entraînerait des changements regrettables, et sans signification pour la systématique vraie. Vous connaissez mon point de vue sur la nécessité d'une nomenclature aussi stable que possible. Aussi je crois qu'il importe que la Commission de Nomenclature zoologique adopte les conclusions du Dr. Vaurie, qui me semblent judicieuses.

(j) By **PROF. DR. K. H. VOOUS**

(*Zoologisch Museum, Amsterdam*)

(Letter dated 23rd October 1956)

With reference to the communication by Dr. Charles Vaurie, "Proposed suppression for nomenclatorial purposes under the Plenary Powers of a pamphlet by R. B. Horniman entitled 'Preliminary descriptions of some new birds' and bearing the date 'January 1940'" in the *Bulletin of Zoological Nomenclature*, I take pleasure in informing you that for the sake of stability in ornithological nomenclature I am supporting the three propositions made by Dr. Vaurie to the International Commission on Zoological Nomenclature on this subject. I much regret that it has apparently not been possible to take up contact with the author, Mr. R. B. Horniman, since it is a very unusual case to suppress so recent a paper without any comment by the author himself or about the scientific standing and activities of the author.

**COMMENT ON THE PROPOSAL MADE BY DAVID RIDE ET AL.
CONCERNING THE HOTTENTOT TEAL**

(Commission Reference : Z.N.(S.) 794)

(For the proposal in this case see *Bull. zool. Nomencl.* 12 : 35-48)

(a) By **V. G. L. van SOMEREN**

(*The Sanctuary, Ngong, Kenya*)

(Letter dated 10th October 1956)

I have just received the above-mentioned paper. The evidence submitted by the applicants is, in my opinion, inconclusive that the type of *Anas punctata* Burchell was in fact *E. maccoa*, although the specimen within the packet bearing the labels quoted is that species.

It can be argued that Burchell must have had a specimen before him when he wrote the description quoted in para. 4, and would suggest the then existence of another specimen, since the description does not, in my opinion, fit any phase in the plumage of *E. maccoa*, either male or female, that I know of.

However, since the applicants state, para. 5, "that the specimen . . . agrees closely with Burchell's description" it would appear necessary for the Commission to examine the specimen in question. The applicants do not state approximate age (adult, subadult, juvenile), or sex of the specimen to account for apparent discrepancy between description and *maccoa* as generally depicted.

If the Commission is satisfied that the description and the specimen do indeed tally, then I would support the application to suppress the name *punctata* Burchell, 1822, as proposed in paragraph 6 on the ground that (a) that the description is not reasonably recognisable as *maccoa*, and indeed has been taken to apply to the Hottentot Teal, (b) by long usage, *punctata* has been applied to and generally accepted as the Hottentot Teal and no other.

(b) By **J. S. TAYLOR**

(*Port Elizabeth, South Africa*)

(Letter dated 26th September 1956)

With reference to the Hottentot Teal, *Anas punctata* Burchell, I am in full agreement with the proposed action.

COMMENT ON THE APPLICATION REGARDING THE GENERIC NAME
 "APUS" AS USED IN THE CLASSES CRUSTACEA AND AVES
 RESPECTIVELY

(Commission Reference : Z.N.(S.) 1020)

(For the proposal in this case see 1955, *Bull. zool. Nomencl.* 12 : 67-85)

(a) By PAUL TASCH

(University of Wichita, Kansas, U.S.A.)

(Letter dated 31st July 1956)

A recent note by the Commission appearing in *Science*, 26th December 1955, read : "*Lepidurus* Leach, 1819 validation ; *Triops* Schrank, 1803—determination of gender and designation of type species for (Class Crustacea, Order Decapoda)".

I should like to discuss the second item. The Order is incorrectly given. The Order should be Notostraca. In addition, I wish to contest the propriety of restoring the name *Triops*. I think *Triops* should be replaced by *Apus* for the following reasons :—

(1) The most cogent argument for validation of the name *Apus* and rejection of the name *Triops* has been given by a foremost student of the notostracans, R. Gurney (1923, "Notes on some British and North African specimens of *Apus cancriformis* Schaeffer" (*Ann. Mag. nat. Hist.* (9) 11 : 496-502)). The essence of his thesis is :

- (a) The name *Apus cancriformis* has been used for generations. This form has been widely figured in zoological literature. Writers on zoological subjects continue to use this name, whereas systematists have replaced it by *Triops*.

One of the leading students of notostracans, Fölke Linder (1952, "Contributions to the morphology and taxonomy of the Branchiopoda Notostrac, with special reference to the N.A. species" (*Proc. U.S. nat. Mus.* 102 : 1-69) wrote : "I fully agree with Gurney and Barnard that the name of *Triops* Schrank, 1803, p. 180, 251 (sometimes spelled *Triopes* or *Thriops*, ought to be rejected" (footnote, *idem* : 52).

These views were endorsed by the present writer (1955, *J. Paleont.* 29(3) : 556-556 ; 29(6) : Paleontologic Notes).

- (b) Until the introduction of the Rules, no ambiguity ever attached to the name *Apus* applied to the branchiopod crustacean.
- (c) Scopoli's original use of the name is itself ambiguous since he applied *Apus* to the bird that had become known as *Cypselus*, and on a preceding page applied the name *Apos* to the anostracan now known as *Branchipus*. Hence, the argument that *Apus* is occupied applying to a bird is in error since *Apos* applied to a branchiopod used on an earlier page, actually had priority over *Apus*. Thus, the transference of the name *Apus* to a bird is, in fact itself a violation of the Rules.

(2) Schrank (1803, *Fauna Boica*. 3 : 1-272) used the name *Triops palustris* (p. 251) and *Triops* (p. 180). In the synonymy that Schrank gives (p. 251), it is of interest that he does not cite Scopoli. Rather he lists *Limulus palustris* Muller and *Monoculus apus* L. In other words, Schrank did not erect the new name *Triops* or *Triopes* in order to replace the *Apus* or *Apos* of Scopoli. If he did, it is most curious that Scopoli is not mentioned in the synonymy he gives. Yet it is from Scopoli's use of the name *Apus* that the argument of its being an occupied name arises. This argument was first advanced by Keilhack (1910). Although he used the name *Triops* in 1909 in a handbook on German Phyllopods, no argument was given at that time for its use. (Cf. Keilhack (L.), 1910, "Zur Nomenklature der deutschen Phyllopoden" (Wurzburg, *Zool. Ann.* 3 : 177-184).)

(3) Now Keilhack's argument (*idem* : 181) was that *Apos* Scopoli is a synonym of *Branchipus* Schaeffer and that his *Apus* applied to the bird known by the generic name of *Cypselus*. Hence, he was satisfied that *Apus* in any form was a preoccupied name. However, there are several aspects to consider that shed a different light on the matter. If, as argued by Gurney (and agreed in by the present writer) *Apos* has priority over *Apus*, then *Apus* is not an occupied name. Although it is true as Gurney pointed out that it is a homonym by Article 34 of the International Rules, this, in itself, is not the most important desideratum. In addition, Schrank's *Triops* was invalid at the time it was proposed (1803) because it was not erected to replace Scopoli's genus *Apus* and the genus which it was erected to replace was not itself invalid at the time. Keilhack's argument in 1910 cannot establish belatedly the validity of the Rules in the year 1803. This would be like living backwards. I feel that we must let each taxonomy be sufficient unto its own day and evaluate it in the context of its times, the contemporary practices, knowledge, misconceptions, etc. Proceeding as Keilhack did, we would rewrite all of history and much of the history of science to bring it up to date.

(4) Thus there is a multipronged argument against the acceptance of *Triops* and rejection of *Apus*. These can be summarised as follows :

- (a) World wide usage in zoological literature of the name *Apus* with no confusion resulting, up to the time of Keilhack (1910).
- (b) The contradictory usage by Scopoli of *Apos* and *Apus*.
- (c) The multiple spelling of the name *Triops* by Schrank, and the fact that he did not indicate that he was replacing Scopoli's name *Apos* or *Apus*, rather that he was replacing names not then occupied.
- (d) No set of Rules should be made retroactive in a way to rewrite the history of actual events. As matters stand, Keilhack, in 1910, is creeping into Schrank's mind, putting words in Schrank's mouth in the year 1803. This impresses the writer as an absurdity.

(5) In the event that the Commission holds that *Triops* has long since been validated I urge it to reopen the matter. The very question it now is considering, i.e. the gender and type species of *Triops*, better than anything else, indicates the confusion surrounding use of this name. By contrast, no confusion is possible for *Apus* (*A. caneriformis*). No zoologist anywhere in the world would, on reading this last name, think it was a bird or an anostracan. Instantaneous recognition that it was a notostracan would obtain.

(6) Even though by "letter of the law" reading, Keilhack's argument can be sustained it seems advisable to heed the consensus of some of the world's leading students of the notostracans that *Apus* prevail and *Triops* be rejected.

(7) In the Branchiopoda section of the *Treatise on Invertebrate Paleontology* (in press), the writer has used the name *Apus* in the unit on Notostraca.

(b) By **WALTER G. MOORE***(Loyola University, New Orleans, U.S.A.)*

(Enclosure to a letter from Dr. Holthuis dated 1st October 1956)

I shall be sorry to stop using the name *Apus* for the Notostracan, but you have presented a very convincing case as to the necessity for such a change.

**SUPPORT FOR THE PROPOSALS BY V. JAANUSSON ON
THE FOLLOWING NAMES IN THE CLASS TRILOBITA :—
"ASAPHUS" BRONGNIART, 1822, AND "CRYPTONYMUS"
EICHWALD, 1825 (V. JAANUSSON)**

(a) By **C. J. STUBBLEFIELD***(Geological Survey and Museum, London)*

(Commission References : Z.N.(S.) 636, 1068)

(For the proposals in these cases see *Bull. zool. Nomencl.* 12 : 90-96, 60-64)

(Letter dated 5th October 1956)

I support Dr. Jaanusson's proposal that the well-known name *Asaphus* Brongniart, 1822, be validated and that *Cryptonymus* Eichwald, 1825, be suppressed for purposes of the Law of Priority but not for those of the Law of Homonymy. I consider both proposals would legalise current usage and would be in the interests of nomenclatorial stability.

(b) By **CHRISTIAN POULSEN***(Universitetets Mineralogisk-Geologiske Institut, Copenhagen)*

(Letter dated 5th October 1956)

I heartily support the applications made by Dr. V. Jaanusson regarding the name *Asaphus* Brongniart, 1822 (Class Trilobita), and the name *Cryptonymus* Eichwald, 1825 (Class Trilobita), and I highly recommend the procedure proposed in connection with these applications.

COMMENTS ON THE APPLICATION BY DENYS W. TUCKER
CONCERNING "GEMPYLUS SERPENS" CUVIER, 1829
(CLASS PISCES)

(Commission Reference : Z.N.(S.) 923)

(For the proposal in this case see *Bull. zool. Nomencl.* 11(9) : 285-288)

- (a) View of the Committee on Zoological Nomenclature of the
American Society of Ichthyologists and Herpetologists

(Extract from a letter dated 14th September 1956)

On 3rd June 1956, I requested the members of the committee on zoological nomenclature of the American Society of Ichthyologists and Herpetologists to send me their comments on Mr. Denys W. Tucker's application for use of the Plenary Powers to suppress the generic name *Acinacea* Bory de St. Vincent, 1804, and the specific name *notha* Bory de St. Vincent, 1804, for the purpose of making the generic name *Gempylus* Cuvier, 1829, and the name *serpens* Cuvier, 1829, the oldest available names for the genus and species concerned.

I can now report that the members of this Committee are unanimous in their support of Mr. Tucker's application.

NOTE: The following statements prepared by individual members of the Committee referred to above were communicated by its Chairman, Dr. W. I. Follett in his letter from which an extract of the opening portion has been given above.

(i) By **ROBERT RUSH MILLER**

(*University of Michigan, Ann Arbor, U.S.A.*)

I have read the application by Denys Tucker which you recently forwarded and find myself in full agreement with his proposal that the International Commission use its Plenary Powers as requested by him.

Indeed, I am most grateful to Mr. Tucker for going to the trouble and care to point out this situation and asking for a ruling from the Commission.

(ii) By **JAMES A. PETERS**

(*Brown University, Providence, Rhode Is., U.S.A.*)

I have read Mr. Denys W. Tucker's request to the International Commission carefully, and feel that it would be in the best interests of stability in nomenclature to support his proposal. Therefore, I would be in favour of our committee sending a letter indicating our unanimous support of said proposal to the Commission.

(iii) By **DR. JAY M. SAVAGE**

(*University of Southern California, U.S.A.*)

In so far as I can determine from the material presented in the *Bulletin of Zoological Nomenclature*, I must say that I tend to favour Mr. Tucker's application for conservation of *Gempylus serpens*. If the ichthyological members of the Committee have some arguments to the contrary I would be interested in hearing them. Otherwise I would vote for the application by Tucker.

(iv) By **NORMAN J. WILIMOVSKY**

(Stanford University, California, U.S.A.)

In my opinion we should endorse the requests of Mr. Tucker contained on pages 287-288 of the *Bulletin of Zoological Nomenclature* in using the Plenary Powers in suppressing *Acinacea notha* and placing *Gempylus serpens* on the *Official List* of accepted names.

(v) By **HOBART M. SMITH**

(University of Southern California, U.S.A.)

The application pertaining to *Acinacea notha* has my approval, at least on general principle, although I am not familiar with the precise situation.

(vi) By **DR. W. I. FOLLETT**

(California Academy of Sciences, U.S.A.)

I have heretofore expressed grave doubt as to the advisability of substituting the frequently subjective criterion of usage for the objective and automatic criterion of priority. However, at the 1953 Copenhagen Congress, it was demonstrated that a substantial majority of our colleagues, particularly in Europe, favoured adherence to usage, and pursuant to their mandate I myself participated in the unsuccessful attempts to formulate a so-called "principle of conservation". Mr. Tucker's application involves a situation that might well be governed by such a principle, had it been possible to devise one that was generally acceptable in full detail. Pending further efforts toward this end, in connection with the forthcoming draft of the revised Rules, it would appear that the Plenary Powers afford the only available means of attaining the result that is generally desired in the present case. In furtherance of a uniform philosophy of nomenclature, I therefore vote in favour of Mr. Tucker's carefully prepared application.

(b) By **CARL L. HUBBS**

(University of California)

(Letter dated 5th October 1956)

If it is not too late I wish to offer full support on each of the seven requests made by Denys W. Tucker. I have also been studying this group of fishes, and am rather familiar with the literature thereon. Mr. Tucker has correctly indicated the general usage, and I feel sure that nearly all ichthyologists will favour affirmative action of his requests. Stability in these cases is doubly desirable since the names he favours have gotten into general and popular literature to a considerable extent.

Mr. Tucker has expressed the cases involved in full detail and with sound logic.

COMMENT ON THE CASE OF "HYPHESSOBRYCON CARDINALIS"
MYERS & WEITZMAN, 1956 VERSUS "CHEIRODON AXELRODI"
SCHULTZ, 1956 (CLASS PISCES)

By DENYS W. TUCKER

(British Museum (Natural History), London)

(Commission Reference : Z.N.(S.) 1082)

(For the evidence in this case see *Bull. zool. Nomencl.* 12 : 184-190)

(Letter dated 19th September 1956)

The ordinary question of date priority for one or other of these names will be decided by the International Commission on the basis of the evidence provided in *Bull. zool. Nomencl.* 12 : 184-190. I can add nothing further to this aspect of the problem, except the expression of a certain curiosity as to why Vol. 4, No. 4 of the *Tropical Fish Hobbyist* should carry the precise date 20th February 1956, whereas the preceding issue is merely dated January-February 1956, and the succeeding one reverts to the similar form May-June 1956. I feel that the Commission should carefully weigh all the possible implications of this phenomenon.

A factor that I would emphasize in favour of *Hyphessobrycon cardinalis* Myers & Weitzman is that this name was clearly published as a voluntary act of publication by these authors and in a journal normally serving as a vehicle of taxonomic publication. *Cheirodon axelrodi* Schultz, on the other hand, does not appear to have been deliberately published by its author.

Dr. Schultz sent a personal letter to Mr. H. R. Axelrod which the latter apparently published on his own responsibility in the *Tropical Fish Hobbyist* 4(4) : 41-43) a lay journal. The letter contains no indication that Dr. Schultz was anticipating immediate publication in that form and, in fact, his concluding paragraph may be construed as a statement that he intended further study before undertaking definitive publication. This interpretation of his intentions is further supported by Mr. Axelrod's statement in *Tropical Fish Hobbyist* 4(5) : 16) that the magazine was already printing before Dr. Schultz's corrected galley proofs were returned.

SUPPORT FOR THE APPLICATION BY J. M. SAVAGE AND JAMES
A. OLIVER ON "AHAETULLA" LINK, 1807 (CLASS REPTILIA)

By HOBART M. SMITH

(University of Illinois, U.S.A.)

(Commission Reference : Z.N.(S.) 772)

(For the application in this case see *Bull. zool. Nomencl.* 12 : 129-160)

(Letter dated 8th August 1956)

In my opinion all of the requests embodied in this application merit approval by the Commission.

**SUPPORT FOR THE PROPOSAL BY C. A. FLEMING ON
"HETERALOCHA" CABANIS, [1851], (CLASS AVES)**

By **DEAN AMADON**

(*American Museum of Natural History, New York, U.S.A.*)

(Commission Reference : Z.N.(S.) 720)

(For the proposal in this case see *Bull. zool. Nomencl.* 12 : 139—142)

(Letter dated 21st August 1956)

I am writing to express my approval of two applications to stabilize certain names in ornithology now before the Commission. One of these, submitted by Dr. C. A. Fleming, seeks to retain the generic name *Heteralocha* for the unique New Zealand Bird commonly known as *huia*. I agree with Dr. Fleming and those who have supported his motion that this species of bird is so often mentioned in general biological literature that it would be extremely unfortunate if the scientific name were changed. For this reason if for no other, the name *Heteralocha* should be retained.

**SUPPORT FOR THE PROPOSAL BY P. C. SYLVESTER-BRADLEY
AND H. V. HOWE ON "LIMNOCYTHERE" BRADY, 1868 (CLASS
CRUSTACEA, ORDER OSTRACODA)**

By **STUART A. LEVINSON**

(*Humble Oil & Refining Co., Texas, U.S.A.*)

(Commission Reference : Z.N.(S.) 1071)

(For the proposal in this case see *Bull. zool. Nomencl.* 12 : 159—160)

(Letter dated 19th October 1956)

I would like to suggest that the application "Proposed addition to the respective *Official Lists* of the generic name *Limnocythere* Brady, 1868, and the family-group name LIMNOCYTHERINAE Sars, 1925" be approved by the Commission.

The application clearly states the present status of the genus *Limnocythere* and the family-group name LIMNOCYTHERINAE. An approval by the Commission will standardize the usage by ostracode workers, leaving no doubt as to accepted spelling.

**SUPPORT FOR THE PROPOSAL BY G. HENNINGSMOEN ON
"PROTOPELTURA" BRÖGGER, 1822, AND FOR THE SUPPLE-
MENTARY PROPOSAL BY C. J. STUBBLEFIELD REGARDING
"PELTURA" MILNE EDWARDS, 1840 (CLASS TRILOBITA)**

By **CHRISTIAN POULSEN**

(Universitetets Mineralogisk-Geologiske Institut, Copenhagen)

(Commission Reference : Z.N.(S.) 1034)

(For the proposals in this case see *Bull. zool. Nomencl.* 12 : 31-32, 252-253)

(a) (Letter dated 5th October 1956)

I heartily support the application made by Dr. G. Henningsmoen regarding designation of a type species for *Protopeltura* Brögger, 1822 (Class Trilobita), and I highly recommend the procedure proposed in connection with this application.

(b) (Letter dated 30th October 1956)

This letter is written in order to inform the ICZN that I fully support Dr. C. J. Stubblefield's request for the validation under the Plenary Powers of the emendation to *Peltura* of *Peltoura* Milne Edwards (H.), 1840 (Class Trilobita) and that I highly recommend the other actions proposed in connection with this matter.

**SUPPORT FOR THE PROPOSAL BY J. WRIGHT ON
"ACTINOCRINUS GILBERTSONI" PHILLIPS, 1836 (CLASS
CRINOIDEA)**

By **RAYMOND E. PECK**

(University of Missouri, Columbia, U.S.A.)

(Commission Reference : Z.N.(S.) 1057)

(For the proposal in this case see *Bull. zool. Nomencl.* 12 : 156-158)

(Letter dated 15th October 1956)

This is to recommend approval of the request of Mr. J. Wright of Edinburgh that the species of *Actinocrinus gilbertsoni* Phillips be interpreted by reference to the neotype designated by him.

Mr. Wright has made a very conscientious search for the holotype and has determined that there is slight possibility that it will ever be found. In these circumstances designation of a neotype by a specialist like Mr. Wright will be of great value to systematists working with Crinoidea.

SUPPORT FOR THE PROPOSAL BY H. B. WHITTINGTON
ON "ACANTHALOMA" CONRAD, 1840 (CLASS TRILOBITA)

(Commission Reference : Z.N.(S.) 998)

(For the proposal in this case see *Bull. zool. Nomencl.* 12 : 22-26)

(a) By ALAN B. SHAW

(*Shell Oil Company, Denver, Colorado*)

(Letter dated 23rd October 1956)

I have just received a separate on the proposed use of the Plenary Powers regarding *Acidaspis tuberculatus*, *Acanthaloma* Conrad, 1840, and other names.

I reviewed this situation myself in 1947 and have reached the same conclusions as those presented by Dr. Whittington. I therefore urge that the Commission use the Plenary Powers to take the action requested in paragraph 12 of the above-cited Reference.

(b) By CHRISTIAN POULSEN

(*Universitetets Mineralogisk-Geologiske Institut, Copenhagen*)

(Letter dated 1st November 1956)

This letter is sent in order to inform the ICZN that I accept the lines of argument put forward by Dr. H. B. Whittington in his application concerning validation of the specific name *tuberculatus* as used in the combination *Acidaspis tuberculatus* Hall (J.W.) in 1859 and, suppression of the generic name *Acanthaloma* Conrad, 1840 (Class Trilobita) and that I highly recommend the actions proposed in connection with this matter.



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THE BULLETIN OF ZOOLOGICAL NOMENCLATURE

The Official Organ of

THE INTERNATIONAL COMMISSION ON
ZOOLOGICAL NOMENCLATURE

PURCHASED

30 AUG 1957

Edited by

FRANCIS HEMMING, C.M.G., C.B.E.

Secretary to the International Commission on Zoological Nomenclature



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PURCHASED

30 AUG 1957

BULLETIN OF ZOOLOGICAL NOMENCLATURE

Volume 12, Part 12 (pp. 321—416, T.P.—XXVIII)

26th August 1957

NOTICES PRESCRIBED BY THE INTERNATIONAL CONGRESS OF ZOOLOGY

The following notices are given in pursuance of decisions taken, on the recommendation of the International Commission on Zoological Nomenclature (see 1950, *Bull. zool. Nomencl.* 4 : 51–56, 57–59), by the Thirteenth International Congress of Zoology, Paris, July 1948 (see 1950, *Bull. zool. Nomencl.* 5 : 5–13, 131).

(a) Date of commencement by the International Commission on Zoological Nomenclature of voting on applications published in the "Bulletin of Zoological Nomenclature"

NOTICE is hereby given that normally the International Commission will start to vote upon an application published in the *Bulletin of Zoological Nomenclature* on the expiry of a period of six calendar months from the date of publication in the *Bulletin* of the application in question. Any specialist who may desire to comment upon the application published in the present Part (Vol. 12, Part 12) of the *Bulletin* is accordingly invited to do so in writing, and in duplicate, to the Secretary to the Commission, as quickly as possible and in any case, in sufficient time to enable the communication in question to reach the Secretariat of the Commission before the expiry of the six-month period referred to above.

(b) Notice of the possible use by the International Commission on Zoological Nomenclature of its Plenary Powers

NOTICE is hereby given that the possible use by the International Commission on Zoological Nomenclature of its Plenary Powers is involved in

Notices prescribed by the International Congress of Zoology (*continued*)

the following application published in the present Part of the *Bulletin of Zoological Nomenclature* in relation to the under-mentioned name:—

obtusa Montagu, 1803 (*Bulla*), protection of, by suppression of two little-known senior subjective synonyms of (Class Gastropoda, Order Tectibranchiata) (Z.N.(S.) 379).

2. Comments received in sufficient time will be published in the *Bulletin*, other comments, provided that they are received within the prescribed period of six calendar months from the date of publication of the present Part will be laid before the International Commission on Zoological Nomenclature at the time of commencement of voting on the application concerned.

3. In accordance with the procedure agreed upon at the Session held by the International Commission on Zoological Nomenclature in Paris in 1948 (see 1950, *Bull. zool. Nomencl.* 4 : 56), corresponding Notices have been sent to the serial publications *Nature* and *Science*.

FRANCIS HEMMING

*Secretary to the International Commission on
Zoological Nomenclature*

28 Park Village East, Regent's Park,

LONDON, N.W.1, England.

26th August 1957.

PROPOSED USE OF THE PLENARY POWERS TO SECURE
THAT THE SPECIFIC NAME "OBTUSA" MONTAGU, 1803, AS
PUBLISHED IN THE COMBINATION "BULLA OBTUSA", SHALL
BE THE OLDEST AVAILABLE NAME FOR THE SPECIES
CURRENTLY KNOWN BY THAT NAME (CLASS GASTROPODA,
ORDER TECTIBRANCHIATA)

By HENNING LEMCHE

(Universitetets Zoologiske Museum, Copenhagen)

(Commission Reference : Z.N.(S.) 379)

The purpose of the present application is to ask the International Commission on Zoological Nomenclature to use its Plenary Powers to secure that the specific name *obtusa* Montagu, 1803 (*Testacea brit.* : 223), as published in the combination *Bulla obtusa*, shall be the oldest available name for the species currently known by that name. The species concerned is a common European Tectibranch which has been known by the name *obtusa* Montagu over a hundred and fifty years. It would be very undesirable that this practice should be overthrown by the resurrection of some long-forgotten name of older date. In the present case the end desired will require the suppression by the Commission under its Plenary Powers of two older subjective synonyms. These names are (a) *alba* Kanmacher (F), 1798 (*in* Adams (G.), *Essays Microscope* (Ed. 2) : 639, pl. 14, fig. 27), as published in the combination *Voluta alba*; (b) *regulbiensis* Kanmacher, 1798 (*ibid* : 640, pl. 14, fig. 28), as published in the combination *Bulla regulbiensis*.

2. The uninterrupted use of the specific name *obtusa* Montagu was first challenged in 1915 (*Proc. malac. Soc. Lond.* 11 : 300—301), in a paper by Iredale, the relevant portion of which reads as follows :—

Montagu, when he introduced his *Bulla obtusa*, recorded as synonyms "*B. regulbiensis*, Turt. Lin. v. p. 351. Adams Micr. 14, fig. 28". Upon comparison I rejected this determination, the figure quoted seeming indeterminable. Montagu later, in the Suppl., 1808, p. 101, noted that Walker erroneously sent him *Bulla obtusa* under the name of *Voluta alba*. Referring to Walker I found a good figure there given, and can only conclude Montagu has confused the two names *regulbiensis* and *alba*. For, while the former, which Montagu recorded as his *obtusa*, is not that species, the latter, which Montagu denied, is undoubtedly this shell. I am not alone in this identification, as Forbes & Hanley, without doubt, quote Walker's figure 61 for Montagu's species. Walker's book, the correct quotation for which is Boys & Walker, *Test min. rar.*, 1784, is non-binominal¹, but in the second edition of the *Essays* on the

¹ An application in regard to this work has since been submitted by Dr. Lemche. This application was published on 28th June, 1957. (*Bull. zool. Nomencl.* 13 : 228-229).

Bull. zool. Nomencl. Vol. 12, Part 12. August 1957.

Microscope by G. Adams, Kanmacher added a chapter on minute shells, and stated that the correct names had been given him by Jacobs. A plate is given, and the figures are copies of those provided by Boys & Walker. There, on pl. XIV, fig. 27, appears a copy of their fig. 61, and in the text, p. 639, it is named *Voluta alba*. This is followed by *Bulla regulbiensis*, so even if it were concluded that these were the same, the former has priority.

The correct name for the type of *Retusa*, then, is *Voluta alba* Kanmacher, *Essays Microsc.* (G. Adams) 2nd edit. p. 639 p. xiv, fig. 27, 1798 (*ex Jacobs MS.*).

3. I am in general agreement with the analysis of the facts as set out in the passage from Iredale's paper quoted in the preceding paragraph but I disagree completely with his conclusion that because of those facts the well-known name *obtusa* Montagu should be discarded in synonymy in favour of the unknown and confusing name *alba* Kanmacher. There are exceedingly strong grounds on the basis of usage against the adoption of such a course. Before discussing these, however, it will be well to take note of two special considerations peculiar to the present case which, quite apart from the question of usage, would lay the adoption of the name *alba* Kanmacher open to the strongest objection. These are explained in the immediately following paragraphs.

4. The problems involved in the interpretation of the nominal species *Voluta alba* Kanmacher, 1798, and *Voluta regulbiensis* Kanmacher, 1798, are extremely difficult and, while, as explained above, I believe that Iredale's treatment of these nominal species is correct, the difficulties involved are such that there must always be some doubt as to the correctness of the arguments on which these identifications are based. The adoption of either of these names for so well-known and so common a species as *obtusa* Montagu would therefore be especially objectionable, as it could not be expected to secure a stable and generally accepted name for that species.

5. The adoption of the name *alba* Kanmacher in place of *obtusa* Montagu would give rise to most serious confusion by reason of the fact that there is a common and well-known species bearing the same name which occurs in the same area and which belongs to a genus (*Cylichna* Lovén, 1846, *Ofvers. K. Vetens. Akad. Forhandl.*, Stockholm 3 (No. 5) : 142) the members of which cannot be separated by their shells from the species belonging to the genus (*Retusa* Brown) of which *obtusa* Montagu is the type species (paragraph 8 below). It is not necessary to stress the intolerable confusion which would be inevitable if in each of these superficially inseparable genera there was a species bearing the name *alba* as its valid specific name. The species of *Cylichna* here in question is *Cylichna alba* (Brown (Captain T.), 1827) (= *Volvaria alba* Brown (Captain T.), 1827, *Ill. rec. Conch. Gt. Brit. Ireland* : pl. 38). As already noted, this is a well-known species and as the name *alba* Brown is the oldest available specific name for it, that name should now be placed on the *Official List of Specific Names in Zoology*.

6. It is necessary now to consider the question of the relative usage in the literature of the specific names *obtusa* Montagu and *alba* Kanmacher respectively. Full particulars under this head are given in a paper by myself entitled "Northern and Arctic Tectibranch Gastropods I. The Larval Shell; II A Revision of the Cephalospid Species" published in 1948 (*K. dansk vidensk. Selsk., Biol. Skr.* 5 (No. 3) : 84—85). It will be seen from the particulars there given that of the 96 papers listed the name *obtusa* was used in 89 and the name *alba* in only seven. Further in the forty years which have elapsed since the publication of Iredale's paper only four authors have followed him in rejecting the name *obtusa* Montagu in favour of *alba* Kanmacher. The name *regulbiensis* Kanmacher has not been used in place of *obtusa* Montagu by any author, either before or since the publication of Iredale's paper, having indeed made only two appearances in the whole literature (1827 and 1848 respectively) on each of these occasions having been used in a sense different from that of Kanmacher. On the ground of usage the case for preserving the name *obtusa* Montagu is therefore overwhelming. I accordingly recommend that this end be secured by the suppression by the Commission under its Plenary Powers of the specific names *alba* Kanmacher, 1798, as published in the combination *Voluta alba* and *regulbiensis* Kanmacher, 1798, as published in the combination *Bulla regulbiensis*.

7. Having now examined the problems involved at the specific-name level in the present case it is necessary to turn to the problems requiring attention at the generic-name and family-group name-levels.

8. The oldest available name for the genus containing the nominal species *Bulla obtusa* Montagu is *Retusa* Brown (Captain T.), 1827, *Ill. rec. Conch. Gt. Brit. Ireland* : pl. 38). Three nominal species were then placed in this genus by Brown, namely two new nominal species (*Retusa plicata* and *Retusa discors*) and *Bulla obtusa* Montagu. The two nominal species introduced by Brown when establishing his genus *Retusa* are evidently either the fry of, or individual variations of, *Bulla obtusa* Montagu and this view has been accepted by all authors subsequent to Brown who have examined this question. From the taxonomic point of view the genus *Retusa* Brown has thus been effectively monotypical from the time of its original establishment. The first author formally to select one of the originally included species to be the type species of *Retusa* Brown was Iredale who in 1915 (*Proc. malac. Soc. Lond.* 11 : 300) so selected *Bulla obtusa* Montagu. (It may be noted at this point that in 1893 (in Tryon, *Man. Conch.* 15 : 294) Pilsbry selected *Bulla truncatella* Bruguière, [1792] (*Ency. méth.*, Vers 1(2) : 377) to be the type species of *Retusa* Brown but that, as this was not one of the nominal species originally included in that genus, that selection is invalid.) In [1844] (*Ill. rec. Conch. Gt. Brit. Ireland* (ed. 2) : 58, pl. XIX) Brown rejected both his name *Retusa* and his name *Diaphana*, referring the species which he had originally placed in those genera to a new nominal genus to which he gave the name *Utriculus*. This name was later used by a few authors in place of *Retusa* but it does not appear that anyone

has ever formally selected a type species for this genus. This is no doubt because of the fact that it was early realised that *Utriculus* Brown, [1844], was invalid as being a junior homonym of *Utriculus* Schumacher, 1817 (*Essai Vers test.* : 62, 203). In order, however, to assign a definite place in the literature to the name *Utriculus* Brown, I now select *Bulla obtusa* Montagu, 1803, from among the originally included nominal species to be the type species of *Utriculus* Brown, thereby making that generic name a junior objective synonym of *Retusa* Brown, 1827.

9. In view of the close superficial similarity between species of the genus *Retusa* Brown and those of the genus *Cylichna* Lovén (paragraph 5 above) it is desirable that the present opportunity should be taken to place the latter name as well as the name *Retusa* Brown on the *Official List of Generic Names in Zoology*. The type species of *Cylichna* Lovén is *Bulla cylindracea* Pennant, 1777 (*Brit. Zool.* (ed. 4) 4 : 100, 117) by selection by Winckworth (R.), 1932 (*J. Conch.* 19 : 232). The specific name of the type species of this genus is the oldest available name for the species concerned and should therefore now be placed on the *Official List of Specific Names in Zoology*.

10. The genus *Retusa* Brown is the type species of the currently accepted family RETUSIDAE. This family-group name, which was originally published in the correct form by Thiele in 1931 (*Handb. syst. Weichthier-k* 1 : 189), should now be placed on the *Official List of Family-Group Names in Zoology*.

11. For the reasons set out in the present application, I now ask the International Commission on Zoological Nomenclature :—

(1) to use its Plenary Powers to suppress the under-mentioned specific names for the purposes of the Law of Priority but not for those of the Law of Homonymy :—

(a) *alba* Kanmacher, 1798, as published in the combination *Voluta alba* ;

(b) *regulbiensis* Kanmacher, 1798, as published in the combination *Bulla regulbiensis* ;

(2) to place the under-mentioned generic names on the *Official List of Generic Names in Zoology* :—

(a) *Retusa* Brown (Captain T.), 1827 (gender : feminine) (type species, by selection by Iredale (1915) : *Bulla obtusa* Montagu, 1803) ;

(b) *Cylichna* Lovén, 1846 (gender : feminine) (type species, by selection by Winckworth (R.) (1932) : *Bulla cylindracea* Pennant, 1777) ;

(3) to place the under-mentioned specific names on the *Official List of Specific Names in Zoology* :—

(a) *obtusa* Montagu, 1803, as published in the combination *Bulla obtusa* (specific name of type species of *Retusa* Brown (Captain T.), 1827) ;

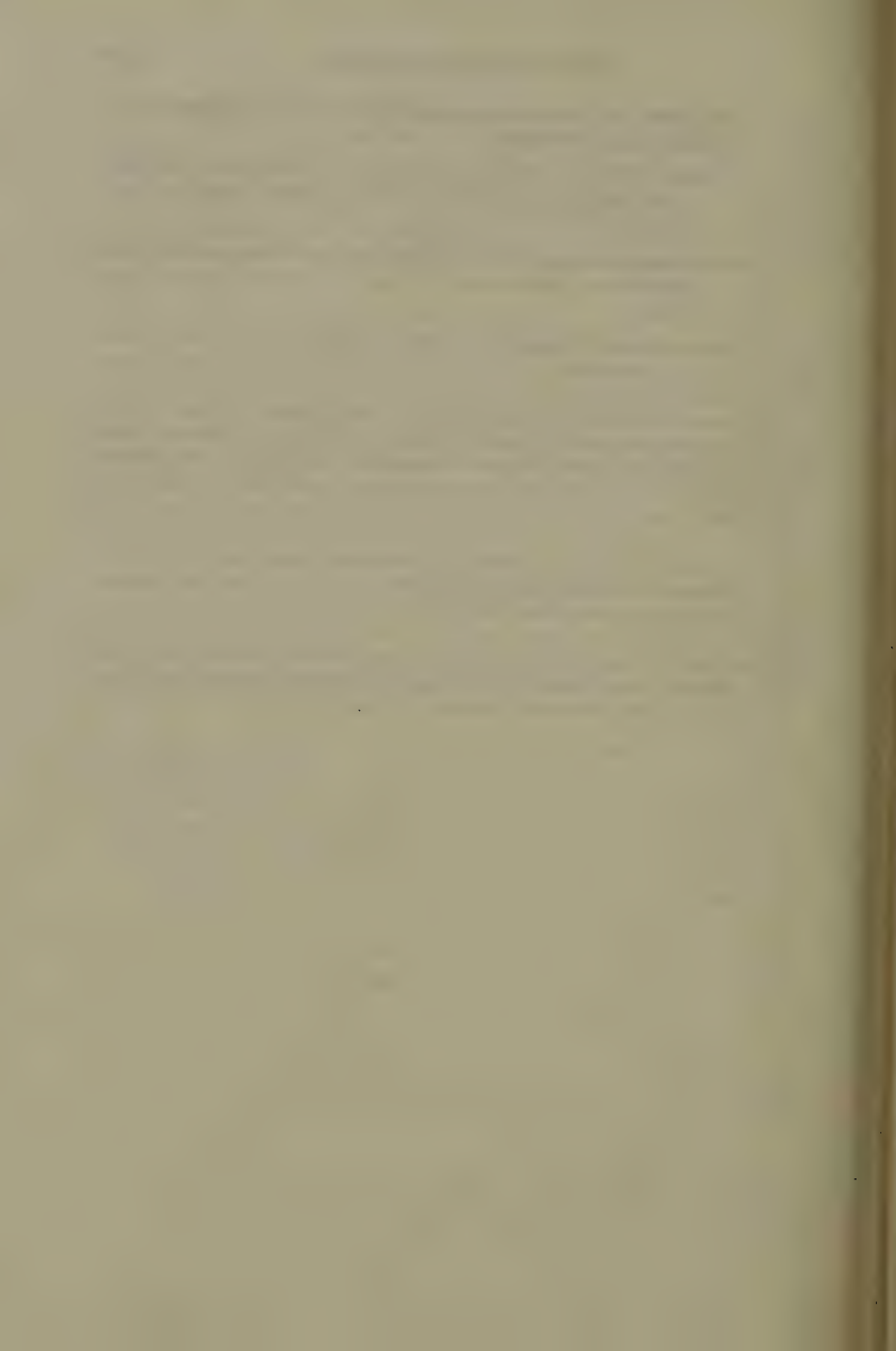
(b) *cylindracea* Pennant, 1787, as published in the combination *Bulla cylindracea* (specific name of type species of *Cylichna* Lovén, 1846) ;

(c) *alba* Brown (Captain T.), 1827, as published in the combination *Volvaria alba* ;

(4) to place the under-mentioned generic name on the *Official Index of Rejected and Invalid Generic Names in Zoology* : *Utriculus* Brown (Captain T.), [1844] (a junior homonym of *Utriculus* Schumacher, 1817, and a junior objective synonym of *Retusa* Brown (Captain T.), 1827) ;

(5) to place on the *Official Index of Rejected and Invalid Specific Names in Zoology* the two specific names specified in (1) above as there proposed to be suppressed under the Plenary Powers ;

(6) to place the under-mentioned family-group name on the *Official List of Family-Group Names in Zoology* : RETUSIDAE Thiele, 1931 (type genus : *Retusa* Brown (Captain T.), 1827).



CORRIGENDA

- page 3. Paragraph 1, 8th line from end: substitute "*Paradoxides*" for "*Paradixides*"
- page 6. Paragraph 8, line 4: substitute "1821" for "[1818]"
- page 26. Lines 4 and 12 from end: substitute "SEQUENZICERATIDAE" for "SEQUENZICERATIDAE"
- page 28. Line 6: substitute "*mandibulare* Lucas, 1846" for "*mandibularis* Lucas, 1840"
- page 30. First line: substitute "*mandibulare* Lucas, 1846" for "*mandibularis* Lucas, 1840"
- page 49. Paragraph 1, line 3: substitute "Trilobita" for "Triolobita"
- page 49. Footnote, second line from end: delete comma between "*Trinucleus*" and "*fimbriatus*"
- page 50. Paragraph 5, line 4: substitute "[Pl.23]" for "Pl. [23]"
- page 54. Line 13 from end: substitute "K. A. von" for "R. A. von"
- page 70. Paragraph 12, first line: insert square brackets round "1814"
- page 89. Paragraph 8(1)(3)(a), first line: substitute "*volvulas*" for "*volvulus*"
- page 122. Line 7: substitute "Ernst" for "Ernest"
- page 147. Title line 3 and Paragraph 1, line 3: substitute "*mycterizans*" for "*mycterizana*"
- page 149. Paragraph 7(II)(A) line 3: substitute "=" for "—"
- page 150. Line 4 from end: substitute "*mycterizans*" for "*mycterizana*"
- page 151. Point (2), line 2: substitute "*mycterizans*" for "*mycterizana*"
- page 153. Paragraph 2, line 7: substitute "*nunicus*" for "*nunicas*"
- page 177. Paragraph 7, Point (2), first line: insert " , on the *Official List of Generic Names in Zoology*" after "1894"

page 182. Paragraph 4, line 5 : substitute " 210 " for " 210 "

page 191. Heading, second line : insert square brackets round " 1768-1774 "

page 216. Paragraph 3, line 2 : substitute " 1949 " for " 1849 "

page 223. Line 7 from end : substitute " : " for " of "

page 223. Line 5 from end : substitute " *sillimani* " for " *silliamani* "

page 224. Second line : substitute " name " for " names "

page 275. Paragraph 2, 7th line from end : substitute " Boulenger in " for " Boulenger "

page 281. Line 5 from end : substitute " *janira* " for " *janiro* "

page 294. Line 6 : substitute " Pruthi " for " Pruthiy "

page 310. Paragraphs 4 and 5 : substitute " R. B. Horniman " for " H. B. Horniman "

page 317. 4th line from end : substitute " 147-152 " for " 129-160 "

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